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UNITED STATES DEPARTMENT OF AGRICULTURE
BULLETIN No. 979

Contribution from the Bureau of Markets and Crop Estimates
H. C. TAYLOR, Chief

Washington, D. C. October 22, 1921

# MARKETING HAY THROUGH TERMINAL MARKETS

By

G. A. COLLIER, Investigator in Hay Marketing, and
H. B. McCLURE, Specialist in Hay Marketing

## CONTENTS

| | Page |
|---|---|
| Country Shippers | 2 |
| Dealers in Terminal Markets | 24 |
| Wholesalers and Retailers in Consuming Territories | 45 |
| Suggestions | 52 |

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CONTENTS.

| | Page. | | Page. |
|---|---|---|---|
| Country shippers | 2 | Wholesalers and retailers in consuming territories | 45 |
| Dealers in terminal markets | 24 | Suggestions | 52 |

Unusual difficulties are encountered in the marketing of hay. In the first place, it must be marketed in the same physical condition in which it is produced and can not be conditioned or graded in the same manner as fruit, grain, or vegetables. Another difficulty at present is the lack of uniformity in business practices. This is due principally, it is thought, to the fact that the business is comparatively new and is not yet sufficiently organized to overcome the wide variations in the trade practices in the different markets. The differences in the character of the hay marketed in the various sections of the country and the variations in the demand for the different kinds of hay are also factors which have hindered uniformity. Grading and weighing methods have not been standardized to any great extent and many losses and much difficulty is attributed to this fact.

Shippers and dealers in different sections of the country have formed organizations for the purpose of improving methods and practices in the marketing of hay. These have no doubt accomplished a great deal, but there is still need for much improvement in the methods of weighing and inspection and for more uniformity in the trade practices in the various markets. There also seems to be a need for a better understanding between shipper, dealer, and receiver and a greater spirit of fairness in the dealings between the different factors interested in the marketing of hay.

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The purpose of this bulletin is to describe the customs and practices prevailing in the various markets in order that producers and others interested in the marketing of hay may know and understand the conditions that must be met in the handling of that commodity. The information contained in this bulletin was obtained from a survey covering practically the entire country, including all of the important hay markets.

Three rather well-defined agencies have grown up in the United States for the marketing of hay. These are country shippers in producing sections, dealers and commission merchants in terminal markets, and wholesalers and retailers in consuming sections. The activities of each of these agencies are fairly well defined and each serves a particular purpose. Not all marketed hay passes through all three of these agencies, but a large part of it does and the most economical method of handling at this time, seems to be that which employs one agency to collect the hay into shipping quantities, another to locate the best markets and forward the hay to them, and another to distribute in the quantities desired by the consumer. Efforts have been made from time to time to eliminate one or more of these agencies in order to lessen the cost of distribution, but at this time the bulk of the hay is probably marketed by the method just described, or some modification of it.

## COUNTRY SHIPPERS.

The country shipper collects the different lots of marketable hay in his territory into carload or shipping quantities. In large surplus producing sections he may devote his whole time to this business, in fact may own warehouses and employ several other men; in smaller producing sections he may ship hay as a side line of some other business.

In grain-producing States the grain merchant is frequently the hay shipper. In some sections the cattle buyer is the hay shipper. Where the amount of hay shipped is not sufficient to pay a man to devote his whole time to the business it is usually handled by a person engaged in the marketing of some other important product of that territory. It is also frequently true that the producer who raises several carloads ships his own hay and possibly some of his neighbors' hay.

Individual producers, however, usually do not ship their own hay unless they are close to a good market or unless they have a sufficient amount to warrant spending the time and money necessary to locate a buyer. The greatest difficulties that producers encounter in the shipment of their own hay are the lack of information as to the grade requirements and trade practices prevailing at the terminal markets

and the lack of sufficient hay to build up a permanent trade if they desire to ship direct to consuming territories. Consumers who must have a constant supply prefer to deal with those upon whom they can depend for shipment whenever supplies are needed. The latter difficulty has in some places been overcome by the formation of cooperative shipping organizations which are able to meet the requirements of consumers in regard to quality and supply.

## THE BUSINESS.

The number of cars of hay handled by country shippers varies greatly. In sections which have only a small surplus a shipper frequently does not handle more than 10 or 15 cars a year and these in connection with some other business. In other and larger producing sections a shipper may handle and ship from 100 to 500 cars from his immediate territory. It appears, however, that on an average, 200 to 300 cars represent a good year's business for a country hay shipper, unless he ships from a number of different points.

### Management.

Some time and experience are required to build up a profitable shipping business. The country shipper must be in a position to meet all competition and pay the producer the best market price, all factors being considered. To do this he must in turn be able to market the hay advantageously. Upon the solution of this problem depend his success and the measure of his service to the producer. If in the marketing of hay he can not render service equal to the amount charged for his service he is not an economical factor in its distribution.

To market his hay successfully the shipper must first know the requirements of the various available markets, as to the character of hay and the size and weight of bales. Some markets pay a premium for straight unmixed timothy hay; others pay as much for good light clover mixed as for straight timothy. Large bales weighing from 200 to 250 pounds sell at higher prices than the smaller bales in some markets while in others the opposite is true. In some sections hay must be "tagged" with the weight upon each bale, in other sections such weights will not be accepted. The shipper must, therefore, familiarize himself with all the conditions and must also select honest and reliable receivers. To obtain this information and experience may require several years, depending upon the ability of the shipper.

### Capital.

The capital required depends principally upon the volume of business transacted. The dealer who ships only an occasional car

needs but little more money than the value of one car of hay, while the dealer who stores a large amount or who ships a large number of cars in a short period of time requires capital equal to the value of the hay stored or of the hay in transit. While banks will advance about 80 per cent of the value of drafts drawn against shipments of hay and will loan money upon hay in storage, it is usually required that the shipper's credit be equal to the risk assumed by the bank in making such loans and advances. At the same time, if shipping facilities are good and the hay is delivered promptly at destination rather a large business may be conducted with limited capital, probably not exceeding $3,000 to $5,000.

In sections where buyers will pay drafts drawn at sight, the shipper can conduct a larger business on less capital, for the reason that he is without the use of his money only as long as it takes the draft to reach the buyer's bank at destination and the remittance to return to the shipper's bank. In many sections, however, buyers will pay drafts drawn "on arrival" only. In this case the shipper must finance the shipment during the whole time it is in transit and if his capital is limited he is often forced to curtail his shipments until the proceeds are received from drafts for cars previously shipped. When freight movement is slow or shipments are rejected because they are not up to grade, or not delivered according to contract, or for some other reason, the shipper with limited capital is frequently greatly handicapped. These business difficulties of the country shipper, however, are seldom shared by the producer, who is usually paid cash for his hay when it is delivered to the car for shipment.

The amount of speculation practiced in the marketing of hay seems to be very limited. Some shippers with warehouses fill them with hay when cars are not available or prices seem relatively low. Other shippers frequently contract for considerable hay to be shipped in 30 to 60 days at the convenience of the producer. In both instances, however, the shippers are merely accumulating sufficient stocks to insure a constant supply for their customers. A few instances, however, have been reported where shippers expecting an urgent demand for hay have bought up large quantities, securing ownership by the payment of a nominal sum. In such cases contracts are frequently broken if the market does not move in the desired direction.

Shippers permanently located in a territory usually handle hay in the same way as any other commodity and generally upon a reasonable margin of profit.

### LOADING THE CARS.

The manner in which cars are loaded is a factor which frequently has considerable influence upon the price for which the hay sells. Hay from a shipper who has a reputation for always loading cars

uniformly generally sells at a premium over hay from a shipper whose loading methods are unknown to the buyer. Hay loaded carelessly into a car invariably brings less money in an open market than that loaded in an orderly and systematic way. Uniform loading as understood by the trade in the various markets is the loading of an entire car, or designated part of a car, with hay of the same character or quality in a systematic manner.

### Methods.

The proper method of loading when the bales are of the sizes designated as quarter or third bales, i. e., bales ranging from 14 by 16 inches to 17 or 18 inches by 22 inches, is in tiers of 16 to 25 bales each, beginning at each end of the car and tiering toward the doorway. Figure 1 illustrates the method of loading in tiers. Four or five tiers can usually be loaded in each end of a car up to the doorway.

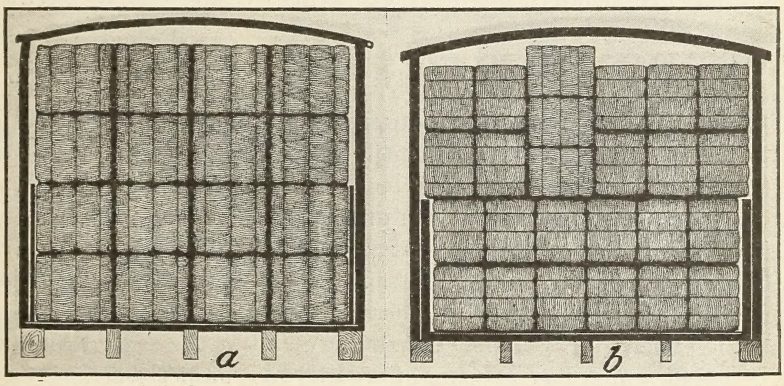


Fig. 1.—Proper method of loading cars to utilize all the space: (*a*) Bales 17½ by 22 inches, 16 bales per tier; (*b*) bales 14 by 18 inches, 25 bales per tier.

Two tiers can usually be loaded in the doorway and if the bales are not too long should be loaded so that the ends of the bales are exposed to view. It also adds to the appearance of the car if any unevenness in the length of the bales in the doorway is allowed for on the back of the tiers. This keeps the longer bales from projecting into the doorway and interfering with the closing of the door.

The large box-press bales weighing from 175 to 225 pounds must be loaded differently. In most cars such bales seem to load best by placing two together end to end across the car and flat upon the floor, then placing two more on top of them and continuing in this manner until the tier is full, always beginning at the end of the car. Eight bales can be loaded in each tier in most cars. Tiers are then added until the car is filled. When, because of the space consumed by the lining in a car, two bales will not fit into the car end to end, four bales are set on end, flat sides together, then four more on top of

them, either on end or flat, as in the tiers first described. As a rule, however, that method of loading is best which allows the greatest number of bales to be loaded in a regular order, because it is always possible to load as many or more bales in regular order as in any other way and buyers prefer that the hay be loaded in systematic order.

An exception to the rule just stated should be made for the loading of new hay. This hay, when baled from the windrow or early in the season, may contain so much moisture that it will heat and mold if packed too closely in the cars. When loading new hay, the bales should be placed on end and far enough apart to leave a small space for the circulation of the air between the bales. It can then be shipped a considerable distance without danger of heating and spoiling. It is usually impossible to load a car to the required minimum weight by this method but the premiums which early arrivals of hay on the market usually command are generally more than equal to the added cost of freight.

### Warehousing.

The facilities of the shipper constitute a principal factor affecting the loading of cars. If the country shipper has a warehouse into which he can place the hay as delivered by the producer it is always possible for him to grade the hay properly and to load the cars uniformly. This, however, is not always done. The hay as received may be of fair uniformity as to grade, and competition for business, especially if the demand is poor, may be such that the shipper can not incur the expense of warehousing the hay and at the same time meet the prices at which hay is being offered by his competitors.

No complete data are available as to the cost of marketing hay through a warehouse. Shippers estimate the cost at amounts ranging from 75 cents to $1.50 per ton. In one instance, however, an accurate record was kept of the cost of warehousing hay on rather a large scale. In 1910 a company composed of prominent and experienced hay dealers was formed at Cleveland, Ohio, to handle hay in an up-to-date manner through a modern warehouse. Railroad facilities were good and no charges were made for switching hay to or from the warehouse. It was the purpose of the company to buy from country points where loading facilities were poor and ship on transit privileges to the Cleveland warehouse, where the hay was to be unloaded, graded, reloaded, and forwarded to consuming sections. The handling facilities were modern and labor costs were not high. It was found, however, that the cost of unloading, classifying, grading and reloading the hay was $1.09 per ton. The cost of the same operations in a warehouse not so efficiently operated would no doubt be higher, while at country points where the labor required could be used

for other purposes when not needed for handling hay the expense would probably be slightly lower. Practically all the handling of hay at warehouses is done by laborers and no machinery other than hand trucks is used. A few warehouses in the country are equipped with machinery for handling the hay and a considerable part of the work is done mechanically. In a warehouse located at Saginaw, Mich., the hay is unloaded from the car onto chain conveyers which carry it to the top floor and over to a grading floor located above the central part of the warehouse. An experienced grader stands at the end of the conveyor and classifies the hay. When classified it is pushed into one of three chutes which lead from this floor to three different locations on each of three floors below. Switches or gates

FIG. 2.—Grading floor in Michigan warehouse. The bales are graded as they are delivered by the chain conveyor. When graded the bales are placed in one of three chutes which delivers them to the floors below. The entrance to one of the chutes is shown at the left. The levers control the gates on the floors below.

in these chutes may be set so that the hay can be placed in the desired location on any of the three lower floors. It is then piled with other hay of similar quality (Figs. 2 and 3). When the hay is to be reloaded it is placed in the same distributing chutes with the switches set so as to discharge the hay onto a conveyer on the ground floor, which delivers it to the car. By this method a carload of hay can be unloaded, graded, and stored quickly or reloaded into another car. With 10 men this complete operation, with the exception of the reloading, can be accomplished in 15 minutes. Six men usually are employed, however, and it takes about an hour to unload, classify, and store the hay in the warehouse. It is estimated that the cost of handling hay through such a warehouse is about $1.50 per ton.

Another factor entering into the cost of warehousing hay is the "transit privilege." Some railroads allow dealers owning warehouses situated on their lines the privilege of unloading hay into their warehouses, of grading it, storing for a period not exceeding 6 months, reloading and rebilling it upon the through rate. While the stop-off charge is from $2 to $3 per car, this is more than covered in most instances by the difference between the through rate and the combination of local rates which would apply if the hay were shipped only to the warehouse, and after a time reloaded and shipped to a consuming market. Many roads do not allow transit privileges, however, which is probably one of the reasons that practically no hay warehouses are in operation in some sections of the country.

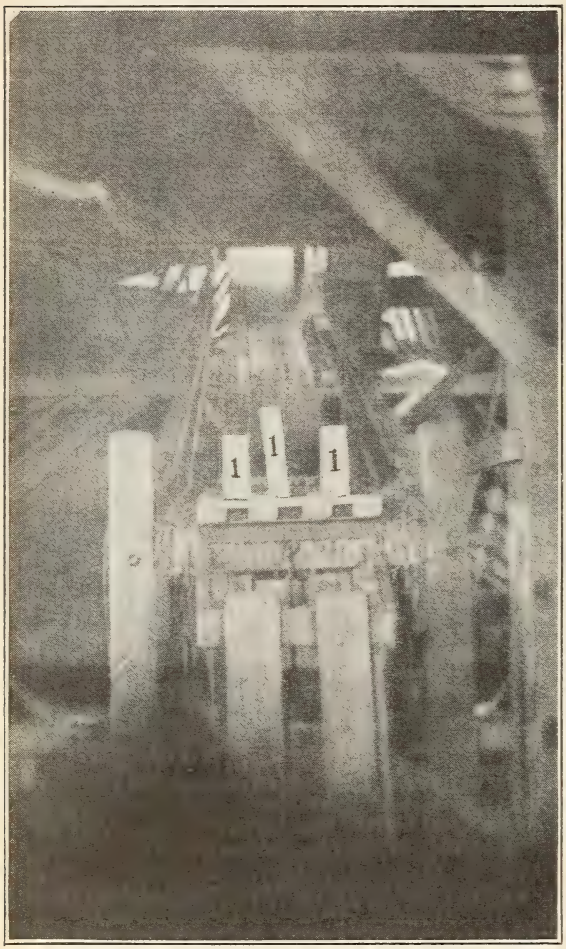


FIG. 3.—One of the gates in distributing chutes. When the pieces numbered 1 are in the position indicated the bale is stopped and its weight opens a trap door in the bottom of the chute. This allows the bale to drop into another chute which delivers it to the floor below. When the pieces numbered 1 are pulled down by the levers shown in Fig. 2 the bale shoots over the trap door onto this floor.

While no complete data are available as to the costs of marketing hay through a warehouse, studies and observations made indicate that on an average hay that has been classified and graded by being handled through a well-equipped warehouse would have to sell about $1 above the price of hay loaded directly into the car. It is asserted that while buyers are frequently dissatisfied with hay that is not of

uniform quality throughout the car, they frequently will not pay the extra amount charged for the classified hay.

### Plugging.

Country shippers sometimes indulge in certain unfair practices. The most prevalent of these is the "plugging" of cars. "Plugging" consists of placing one or more bales of inferior hay in the tiers of good hay. This inferior hay is usually loaded only in the tiers back from the doorway, where it will not be seen during the inspection which is now conducted in most markets, and where the buyer will not find it until he has paid the draft and has the car partly unloaded. In some cases it is evident that hay of inferior quality has been deliberately placed in tiers with hay of the quality stated in the terms of sale with an unmistakable intent to defraud. Country shippers loading direct from wagons may also be guilty of this practice.

Shippers engaged in plugging excuse their acts by claiming that the feeding value of the lower grade hay is about equal to that of the higher grade, that since such hay is produced it must be marketed, and that this is about the only means of disposition. Receivers in consuming sections say that the practice is not confined to any one shipping section and estimate that probably 10 per cent of all cars received show evidence that inferior hay has been intentionally loaded with the better hay.

Regardless of the conditions under which plugging practices are carried on, they are unfair and dishonest, and commercial organizations interested in the marketing of hay can advance the cause of improved marketing methods by penalizing or barring from membership and privileges shippers or dealers guilty of such practices.

### Difficulties.

Country shippers who do not own warehouses often find it almost impossible to load cars of uniform quality because of certain conditions of production, handling, and transportation.

The methods of growing, curing, and storing affect the quality of hay. Producers in some parts of the country are very careless with their meadows and instead of plowing and reseeding them when weeds, grass, or briers appear, they continue to cut the hay as long as there is a trace of the original kind of grass planted. Hay cut from such meadows can not be of uniform quality and if loaded directly into a car is sure to cause trouble and loss. Again, some of the hay, even from a clean meadow, may get wet and damaged in curing. If the producer places this hay with the good hay in his mow or stack the quality of the product when baled out for market will not be uniform. Some bales will be of good quality and some of poor quality and some bales will contain both good and poor hay. It

is almost impossible to classify and grade this kind of hay even through a warehouse. Improper storage may also cause considerable difficulty and does not contribute to uniform loading. Hay stored in barns which are out of repair is frequently damaged from the weather. A leak in the roof may cause a damaged spot several feet in diameter and several feet deep in the mow. Although the baler may not intend to mix this damaged hay with the good, part of the bales are likely to contain some of the damaged hay and if these bales are not separated from the others they will probably cause a discount on the price of the whole carload. Similar troubles may be experienced when hay is baled from a stack from which all weather-damaged hay has not been taken before baling. Damaged hay left on the sides of the stack is sure to appear in some of the bales, so that the quality of the lot will not be uniform.

The quality of a car of hay may not be uniform because of conditions of handling. Several different lots may be loaded into the same car. Where country shippers have loading sidings but no warehouses, the hay is generally loaded into the cars just as it is delivered by the producer. If the shipper or his representative is present to see that the hay delivered corresponds in quality to the grade bought he may sort out the badly damaged bales and refuse to take them. Frequently, however, the shipper has bought the hay by the lot at a specified price and the producer insists on delivering without regard to variation in quality. If enough hay is being delivered to load several cars at a time the shipper may be able to classify the hay and load the different grades into different cars, provided he can get the cars as needed.

Some shippers depend upon producers to load their own hay, and this practice often causes considerable difficulty. Because of their lack of opportunity to familiarize themselves with the grades of market hay, producers usually do not comprehend the need for loading cars exclusively with hay of a certain grade or mixture. They usually assume that the best grade of hay is the kind relished by their own stock, but grades based principally upon color and mixture are used as the basis of quality by buyers and receivers. Producers, therefore, can not be expected to classify and load their hay according to the grades desired by a buyer in some section of the country the requirements of which they have had no opportunity to learn.

Ability to obtain cars as needed is one of the factors in uniform loading. The shipper may order two or more cars to be placed at his loading point and may receive assurance from the railroad agent that they will be there on a certain date. He therefore arranges with the farmers from whom he has bought lots of hay to begin delivery on that date. The short time allowed by railroads in which to load cars makes it necessary to begin loading promptly after the cars are placed. When hay must be hauled some distance, the shipper frequently arranges to have some of it on hand when the cars arrive.

It very often happens, however, that the shipper does not receive the number of cars ordered. If he has ordered four he may receive two. When this occurs some of the hay intended for the other cars must be loaded into those received, as it is usually impossible to persuade the producer to haul the hay back to his barn and deliver it at a later date. This circumstance results in loading cars of a mixed quality unless all the hay of the various lots is of the same quality, which is frequently not the case. Again, the lots of hay delivered may be in excess, possibly 10 or 12 bales, of the capacity of the car. By the terms of the sale this hay must be accepted by the shipper, who, not having place to store it, places it into another car being loaded at the same time, but which possibly contains hay of an entirely different quality. This accounts for the few bales of clover or clover mixed which receivers sometimes find in a carload of timothy.

Some shippers who do not have regular hay warehouses have small storage sheds or barns where they place the few bales of hay of inferior quality or of different grade which the farmers deliver with their other hay. When enough has accumulated to make a carload it is loaded and shipped to some market where it can be graded and sold on its merits.

As the marketing of hay is conducted at this time, it is part of the business of the country shipper to know the quality and grades of hay that are desired by buyers in the various markets, and the distant buyer certainly has a right to expect the country shipper to know the character of hay contained in the cars he is offering for sale.

The function of the country shipper is to collect into shipping quantities the various lots of hay which producers have to sell, and to see that they are weighed correctly and classified and loaded so that the quality of the hay will be as uniform as possible and of the grade specified. If he does not do these things he is not rendering a service commensurate with the charges exacted and should not be considered as an economical factor in the marketing of hay.

### SALES AGENCIES.

There are a number of agencies to or through whom the country shipper may sell, and the terms of sale vary as the hay is sold to different buyers, in different sections, or under different market conditions. The four principal agencies are consumers, wholesalers and distributors, track buyers, and terminal markets. These may not all be available at the same time, but one or two are always in the market and afford practically as continuous a market for hay as exists for grain.

#### Consumers.

Sales may be made direct to the consumer. Shippers located in sections tributary to large consuming markets can very conveniently

make sales and shipments direct to consumers who are carload buyers of hay. It is also possible to sell to consumers located in more distant sections, but there is more difficulty in establishing and maintaining a business contact with such customers. When dealing with near-by consumers the seller can keep in touch with the needs of the customer by personal visits or by telephone and thus anticipate his needs and be in a position to fill them promptly. When the buyer is located at a distance, more difficulty is experienced by the shipper in supplying his needs. After a shipper through advertisements, correspondence, or visitation, either personal or by a representative, has secured a number of consumers as customers, he still has the problem of holding their trade.

The desires of shippers to obtain the highest market price for their hay and of the buyers to obtain their hay at the lowest market price are the principal reasons for the practice of marketing direct from country shipper to consumer. Some buyers are of the opinion that they can obtain better hay, or at least hay better suited to their needs, if they can buy direct from a reliable shipper located in a territory producing the kind of hay desired. On the other hand, consumers in some sections prefer to buy only from a broker, distributor, or local representative of the shipper. The difficulty of obtaining the quality desired and of creating and maintaining satisfactory business relations seems to be the principal objection to buying direct from country shippers.

Although the country shipper may sell direct to the consumer, he must meet competition from other shippers. To do this successfully he must make an effort to obtain his customers in the territory to which he has the most advantageous freight rates; he must learn the character and grade of hay that his customers desire and need and must have and maintain a supply sufficient for his customers' needs at all times.

Difficulty of maintaining a satisfactory supply is one of the important reasons accounting for the relatively small amount of hay marketed direct from shipper to consumer. It takes either a long time or considerable expense to obtain good customers in distant markets, and if the dealer can not make shipments as the hay is needed, the customer is forced to seek a new source of supply and is then generally lost to the shipper. It is therefore necessary for shippers to have a good volume of business distributed throughout the year or a large storage. Many country shippers do not have these.

Because of light crops in some sections and heavy crops in others, the direction of movement is frequently changed and shippers who have established a good business with consumers in a particular territory find that they can not meet the competition from shippers located in the sections of temporarily heavier production. It there-

fore has developed that the marketing of hay direct from country shipper to consumer is confined largely to shippers tributary to large consuming sections or markets, or to shippers or associations with a storage or a large volume of business well distributed throughout the year.

The terms of sale depend somewhat on the method employed in making the sale. If the sale is by personal call or telephone, or even by letter, the terms respecting grades are usually more descriptive. Grade designations may not be mentioned, the sales being made on description, using local terms, such as "good feeding hay," "half and half," "good dairy alfalfa," "choice barn hay," etc., both buyer and seller being familiar with the quality of the hay to which the various terms are applied in their section or market.

Sales by letter may be made on the same trade terms; but as sales by letter are usually made when the buyer and seller are located at more distant points, there may not be the same mutual understanding of local trade terms. It is therefore generally necessary to use more widely known terms, such as No. 1 timothy or No. 1 alfalfa. A description of the hay, however, is usually added in order that there may be the best understanding possible.

In sale transactions by telegraph, brevity and the use of code words make it necessary to use grade designations only and both buyer and seller must have a definite idea as to the character of the hay represented by the various grade designations. The lack of an understanding of such grade terms on the part of some consumers is probably partly responsible for their reluctance to buy hay in this manner. The telegraph is most satisfactory in transactions between those who have a thorough understanding of trade and grade terms and the market needs of the various sections. It can be used advantageously between dealers in markets or territories using the same grade standards and trade rules.

The advantages to the country shipper of selling his hay direct to the consumer may be summarized as follows: Better prices because of the elimination of intermediate handling costs, including commissions, inspection charges, etc.; and less difficulty with grades because of the absence of technical grading and because of a better understanding brought about by the use of terms descriptive of the character of the hay.

The disadvantages are: The difficulty and expense of obtaining and maintaining a good list of customers; the difficulty of keeping supply and demand equalized; and the losses caused by refusals and rejections for various reasons on the part of the buyers.

Rejections are no doubt the cause of the greatest loss which the shipper is likely to encounter. Some buyers reject hay unfairly when conditions make it disadvantageous for them to accept it. Large

shippers with representatives in the various consuming sections can usually, through the efforts of their salesmen or representatives, arrange a settlement that prevents a heavy loss; but smaller shippers conducting their business by letter or telegraph frequently suffer severe losses from this practice.

### Wholesalers and Distributors.

After the consumer, the next most direct agency to which the country shipper may sell his hay is the wholesaler or distributor in consuming sections. Sales may be made to them direct in the same manner that sales are made to consumers. In some sections, notably the South, wholesalers and distributors generally prefer to buy through a broker or other representative of the shipper for the reason that the broker or representative is located in their market or at least in near-by territory and as an agent of the shipper is conveniently at hand if any difficulty arises relative to the sale or shipment of the hay.

### Sales through brokers.

Brokers in practice are shippers' agents. Their business is to sell to the dealers in their market or territory the commodity handled by the dealer or shipper whom they represent; the prices are fixed by the shipper. Brokers are located in all the principal markets and distributing points in the South and at many markets in other sections of the country. They handle the hay on a brokerage or commission basis and their rates range from 25 to 75 cents per ton. The usual brokerage fee at present is 50 cents per ton. Brokers should not be confused with commission merchants who operate in northern and western markets, for the services rendered by these two classes of dealers vary considerably.

Sales are usually made in the following manner: A shipper having hay for sale telegraphs a broker whom he has already engaged to represent him in a certain market, giving the broker the prices, grades, and number of cars he has for sale. The broker is frequently instructed to sell subject to the shipper's confirmation, in order to make sure that the hay has not been sold by brokers in other markets who may have been engaged to sell the same hay. Unless there is an unusual demand in a market the broker can probably sell only a part of the cars offered by the shipper. For this reason several brokers are instructed to sell the hay.

Upon receipt of the wire from the shipper, the broker canvasses by telephone or in person the various buyers in his market, offering the hay at the price quoted by the shipper, plus his brokerage fee, provided it has not already been included in the quotation. If he is able to sell one or more cars of hay he immediately wires the shipper to

book the order, giving the name of the buyer and the quantity and grade sold, together with the terms of sale as to time of shipment, etc. If the offer from the shipper is subject to confirmation the shipper telegraphs to the broker or buyer a confirmation of the sale, provided the hay offered has not already been sold by another broker. A written confirmation is usually also sent to the buyer and the broker's account is credited with the amount of brokerage earned by the sale. In case the hay has been sold, the order is not accepted unless the shipper has obtained or can obtain other hay to fill the sale and the broker is so advised.

Brokerage settlements are usually made between the shipper and broker at the end of each month. Some shippers remit brokerage only for the hay which has already been shipped on the orders received. While such settlements are accepted by most brokers it is generally held that brokerage is due and payable when the actual sale has been consummated. Some difficulty occasionally arises because of the refusal of shippers to pay brokerage on shipments which have been rejected upon arrival by the buyers. Brokers consider this practice unfair. On the other hand shippers claim that brokers are sometimes unfair and that in order to make sales they make promises to buyers which shippers know nothing about and which they can not fulfill. Such practices may increase brokerage accounts but they often cause rejections.

While the broker's responsibility is supposed to end with the consummation of the sale, most brokers are interested in maintaining profitable business relations with the shipper and buyer and continue to look after the interests of both in an impartial manner until the whole transaction is completed. Additional charges are seldom made for such services unless another sale is actually made. These extra services, however, frequently prevent heavy losses to shippers and also protect the buyer from inconvenience and loss.

### TRAVELING SALESMEN.

In some sections a great deal of hay is sold by traveling salesmen representing large shippers or wholesalers. Country shippers doing only a small business yearly probably find it impossible as a matter of economy, to employ traveling salesmen; but larger firms frequently employ, and prefer, them to brokers. The salesman or representative is kept informed by letter and wire of the amount of hay the shipper has to offer from day to day and of the prices at which it may be quoted.

The salesman, while representing a shipper in a producing section, may be located in a consuming section and travel in neighboring territory where he is acquainted with the firms who are his customers

or he may travel direct from the office of the shipper. His methods of making sales differ but little from those of a broker. He usually works on a salary, or a salary and commission basis, and probably covers a larger territory than most brokers. He not only makes sales but looks after collections and is expected to adjust any difficulties that may arise concerning shipments into his territory. He is also supposed to obtain new customers and keep old ones satisfied and to keep the shipper informed about the market situation in his territory. In general, he must be an efficient sales agency able to handle satisfactorily the hay offered by his employer, the country shipper. These salesmen frequently represent firms selling other commodities also, or they may sell other products for the same firm. Because of the large volume of business necessary to support salesmen for hay alone it is not possible for many shippers to employ them unless they buy hay at a number of points.

### Track Buyers.

In some sections shippers who buy hay at a number of stations or from other shippers who handle only a few cars are called track buyers. A number of such shippers are located in New York, Ohio, Indiana, and Michigan.

Country hay shippers who have a small volume of business may often sell advantageously to track buyers, as the prices which they offer may yield a larger net return than sales by other methods. This is possible because of the better facilities for distribution that the larger business of the track buyer makes possible.

The track buyer usually confines his buying operations to a limited area which is small enough to permit him to keep in touch by telephone with the various country shippers from whom he purchases hay. This constitutes a near-by market for the shipper and because he can readily communicate with the buyer and fully describe the hay he has for sale, many of the difficulties relative to grade that are encountered when he attempts to ship his hay to distant markets are eliminated. Many track buyers pay sight drafts for all or a part, usually 80 per cent, of the invoice price of the hay. This is a distinct advantage to a small shipper with a limited amount of capital.

While track buyers are usually able to handle the hay offered by their customers and many of them have salesmen or representatives in consuming territories continuously, it sometimes happens that at certain periods because of a poor demand they can not buy and distribute the amount of hay that country shippers have for sale. It then becomes necessary for the shipper to find a new market, the requirements of which he may not know. This may cause him considerable difficulty and loss and is one of the unsatisfactory condi-

tions that may arise if a country shipper relies entirely upon one marketing agency for the disposal of all his hay.

Track buyers usually distribute their hay through brokers or salesmen in consuming territories and seldom go to large markets except to dispose of a surplus. They usually do not operate warehouses but ship direct from country shippers' tracks or warehouses. When such dealers operate warehouses and handle hay through their warehouses direct from producer or from other country shippers, upon a transit privilege, they are in most sections termed wholesalers. The term track buyer is applied usually only to those who handle or bill the hay direct from loading track to destination.

### Terminal Markets.

Another agency which is available to the country shipper in the marketing of his hay is the terminal market, and it is available when the others are not. While the prices obtained for hay shipped to terminal markets during periods when there is a demand from no other source may not be all that could be desired, these markets provide places for marketing surpluses.

There are no large public storage warehouses in any of the large central western markets but private storage space is sufficient to accommodate a considerable amount when prices are such that the owners consider it a good business proposition to store their hay. The railroads provide warehouses in several of the eastern markets, including New York and Boston. Many terminal markets also have excellent distributing facilities, being located at railroad centers which provide transportation at advantageous rates to large consuming areas. These markets may have but a small local demand and practically no storage but still handle a large amount of hay. Among such distributing markets are Kansas City, St. Louis, Omaha, Chicago, Memphis, and Cincinnati.

Country shippers who desire to ship to terminal markets advantageously must become familiar with practices and conditions prevailing at such markets. Among these the more important are the methods of weighing, of inspection and grading, the amount and kind of storage available, and the methods of rebilling cars. The last mentioned is important because it enables the shipper to know how to bill his cars to a market in such a way as to take advantage of the best rebilling privileges.

Many country shippers avoid shipping to terminal markets because of their lack of knowledge concerning the various methods of handling hay and because such shipments usually result in unsatisfactory price returns. The various practices prevailing at the principal markets will be discussed in another part of this bulletin.

It is impossible to advise the shipper as to the times when hay may be marketed most advantageously at terminal markets, because successful handling depends to a great extent upon the ability of the shipper and upon his knowledge of the current market situation in the markets or consuming territory available to him.

### METHODS OF SELLING HAY.

The profits of the country hay shipper depend as much upon the methods and terms of sale employed as upon the markets to which he sells. In fact the method of selling and the terms of sale are frequently the factors determining whether a sale is profitable or not. There are four different methods by which the shipper usually sells or markets his hay, namely, "shipper's track," "to arrive," "delivered," and "on consignment." These relate to the time at which the terms of sale apply.

#### "Shipper's Track."

The sales term, "shipper's track" means that the whole sale is consummated at the shipper's loading point and that unless otherwise specified all liability of the shipper ceases when the bill of lading has been signed by the railroad agent and the car has been accepted for shipment by the transportation company. The advantages of this method to the shipper are evident. He is not liable for any future losses that may occur and gives no further attention to the movement of the car. The difficulty is to find buyers who will purchase hay by this method.

The reliability of the shipper and the state of the markets are the principal factors entering into a sale of this kind. If the buyer is certain of the honesty and reliability of the shipper he may not hesitate to buy his hay "shipper's track," but if he has any doubt as to the shipper's knowledge or judgment of the character of hay loaded into the car or of his honesty, he will not buy by this method unless forced to do so by an urgent demand which he has been unable to fill in any other way. The method is entirely fair, however, and there is no good reason why hay should not be sold as freely by this method as by any other.

#### "To Arrive."

The term "to arrive" as applied to the marketing of hay is given slightly different interpretations in various sections of the country and by different dealers. It is frequently used synonomously with the term "in transit" and is applied to sales which are made while the hay is en route from shipping point to destination. The terms of such sales are usually the same as those of "delivered" sales. "To arrive" is also used to indicate shipments to be made at a future date,

and in such cases a limit is usually placed on the time at which such shipments may be made or may arrive.

The advantage of the "to arrive" sale, when the term is used to indicate that the shipment is in transit, is that it makes it possible for a shipper to bill out and ship his hay to some market or rebilling point and take advantage of any favorable market fluctuations while the hay is in transit. It frequently happens that a shipper who ships principally to consuming territories may not have sufficient orders at a particular time to take all of the hay that is being loaded. If the loaded cars are allowed to stand on shipper's track awaiting a sale, demurrage will accrue so the hay is billed to some terminal market or to some junction or rebilling point. If an order for such a car of hay is received from the section toward which the car is moving while the car is en route, it may be diverted from the original billing and billed to the new destination. Or if a different market from the one to which the car is billed seems more advantageous, the car may be sold to dealers there and diverted to that destination.

When the term is used to denote future shipment the principal advantage to the shipper is that he may sell his hay as bought from the producer and make shipment as it is delivered or as cars are available. This, of course, eliminates a great deal of the risk of marketing.

### "Delivered."

On a sale "delivered," all terms apply at destination. The shipper assumes all the risk of delivery and while the price may have been decided upon previously the buyer makes no payment, and has nothing to do with the shipment until it is delivered in his market. Most of the sales to consumers and to distributors in consuming territories are made by this method.

### Consignment.

A great deal of the hay marketed, especially that shipped to terminal markets, is consigned. The number of commission men located at the various markets whose only business is the handling of such shipments is indicative of the amount of hay consigned to the terminal markets.

Large markets provide a place where surplus hay may be marketed. Many of them have made a special effort to provide facilities for the most economical handling of the hay consigned to them. By providing special sale tracks or yards where all the hay may be placed and offered on a competitive basis for sale to the highest bidder, they have established an open cash market for hay similar to that provided for grain by the grain exchanges.

The broad, general character of the demands at terminal markets frequently makes it advantageous for shippers to consign their various grades of hay to them. Certain grades, because of their peculiar character, can generally be consigned to an advantage because they sell better when the buyer is at hand to see what he is buying.

However, only large markets with a large local demand or distributing markets with a broad shipping demand can generally be used advantageously for consignments by a country shipper. The needs of small markets are quickly filled and hay arriving when there is little demand must frequently be sold at a heavy discount to prevent demurrage or storage charges. To obtain the best results from consignments, shippers must themselves know the requirements and practices at the markets to which they consign their hay, as well as the facilities the markets have for handling. They must also keep informed as to supply and demand.

One of the principal advantages of consigning is that the shipper may offer his hay in large open markets and may have a representative trained in the practices of that market to look after his interests for him. If so instructed the commission merchant will dispose of the shipper's hay only upon his order so that the shipper may always control the sale. Another advantage of consigning is that it provides a means of marketing hay when it is difficult to sell it by any other method.

One of the principal difficulties which shippers are likely to encounter in consigning hay is the wide fluctuation in price which frequently occurs at markets where the bulk of hay received consists of consignments. When a good price and demand prevail at any market, all shippers naturally take advantage of those conditions with the result that receipts soon exceed the demand and prices decline sharply. All shipments are then diverted or stopped until another period of light receipts follows and prices advance. The same thing is then repeated. For this reason many shippers continually receive unsatisfactory returns for their consigned hay.

From observations made at a number of markets it appears that a policy of continued consignments is more satisfactory than consignments made only when prices are quoted unusually high at some market. Another difficulty arises from the fact that consignments are frequently subjected to more stringent grading rules at terminal markets than are enforced in some consuming sections so that although comparable grades are quoted higher, the hay does not actually bring so much money as when sold at a lower price to less particular buyers.

Shippers who are not familiar with the grade requirements and market practices at the markets to which they consign their hay are

usually disappointed with the returns from consignments to those markets.

### TERMS OF SALE.

The three general terms that apply to sales of hay refer particularly to the kinds of weights and grades and are designated as "shipper's weights and grades," "destination weights and grades," and "market weights and grades." These may overlap slightly in some instances and may be applied to the different methods of sale.

#### Shipper's Weights and Grades.

A sale by "shipper's weights and grades" means that the weight determined and the grade assigned by the shipper are to be accepted by the buyer as the weight and grade of the hay. Obviously this term is always applied to hay sold shipper's track and is seldom used except in a modified form in any other method of sale.

The buyer usually reserves the privilege of inspecting the hay to determine whether it is of a character which he considers representative of the grade bought. There is no good reason why shipper's grades should not be as reliable as buyer's grades, but it is argued that as the shipper already knows the quality, the buyer should have an opportunity to inspect the hay before paying for it. It seems, however, that the lack of uniform national grades, and of a uniform interpretation of existing grades, is the principal cause of the lack of confidence between the shipper and buyer relative to grades. It is probable that the unfair practices of some shippers, which have already been mentioned, have been to some degree responsible for this lack of confidence.

There is a much more general use of shipper's weights than of shipper's grades. In accordance with a practice now in rather general use, the buyer accepts the shipper's weights less an amount of 1 to 3 per cent, most generally 2 per cent, of that weight. This deduction is supposed to represent the loss in weight caused by the handling of the hay and is frequently deducted whether the actual weight as found by the buyer is that much less than the shipper's weight or not. Many buyers do not have weighing facilities and therefore accept the shipper's weight less the 2 per cent. When the bales are tagged the outturn weights are computed from the weights marked upon the tags but the 2 per cent is usually deducted. These weights are in effect, however, shipper's weights.

When distributors or consumers have weighing facilities they usually insist upon destination terms when buying from country shippers.

#### Destination Weights and Grades.

The term "destination weights and grades" is self-explanatory and leaves the determination of the weights and grades almost

entirely with the buyer. When the shipper sells destination terms he is bound to allow any claims made by the receiver which are properly supported by weight and inspection certificate or by an affidavit by the receiver as to the outturn weights and grades. If there is a loss in weight and the amount indicates that the loss was probably caused in transit the shipper must handle any claim which is made, whereas if the hay has been sold "shipper's track" the responsibility of presenting the claim rests with the receiver.

Another term "shipper's weights and grades guaranteed" is sometimes used which although it sounds better to the shipper, means practically the same thing. If the shipper guarantees his weights and grades it must be to the satisfaction of the buyer. It is evident that if no unfair practices are indulged in by either the shipper or receiver there is no good reason why "shipper's weights and grades" should not be as reliable as destination weights and grades, especially if both receivers and shippers use their own judgment as to grades and have the same or similar weighing facilities.

### Market Weights and Grades.

Hay shipped to or from a terminal market which maintains official weighing and inspection departments is generally sold "market weights and grades" as determined at that market. For example, hay sent by a country shipper to a dealer in Kansas City is sold on weights and grades determined there. The same thing is true on hay bought from Kansas City.

In support of the practice of requiring both the shipper and buyer to accept the official weights and grades of any specified market as final, dealers in terminal markets advance the argument that because both the weighing and inspection departments are maintained as impartial but qualified agencies, their findings as to weights and grades are generally considered more dependable than those of either an individual shipper or buyer. Many shippers and receivers do not agree with this claim.

However, from a survey made by the Federal Bureau of Markets, it appears that considerable effort is being made in many of the principal markets to maintain reliable and efficient weighing and inspection services. While these services are not perfect most of the difficulty experienced by shippers at the terminal markets is apparently caused by the sharp practices of some of the dealers rather than by inadequate facilities. This is also true of many of the difficulties between country shippers and buyers in consuming territories.

### SHARP PRACTICES.

Certain unfair practices are carried on by some country shippers. The most common of these is the "plugging" of cars. This prac-

tice more than any other has probably caused buyers to demand destination terms. Another unfair practice is the shipment of hay of a lower grade than that specified in the terms of sale. When the demand is urgent it is thought that the buyer will be compelled to accept the lower grade because he can get no other before his stock is exhausted. Another is the delaying of shipments sold for deferred delivery beyond the time specified. This is done in order to obtain more money by shipping to some other market. Other hay is shipped on the former sale when prices have declined to the level at which the sale was consummated. In such instances shippers claim that producers have not delivered the hay or that they are unable to get cars for shipment. This practice can not be carried on except when demand is urgent and shipments are moving slowly.

In the matter of weights, shippers are sometimes guilty of adding a little, often as much as 1,000 pounds, to the actual weights when making their invoices. This is usually done to overcome any loss by handling, etc. If a buyer weighs the hay and makes a claim for the difference in weight or refuses to pay for an amount which his weights indicate was not in the car, the shipper, after a formal request for unloading weights, etc., usually pays or allows the claim. If the buyer does not weigh the hay the shipper is just that much ahead.

An instance has recently been reported to the Bureau of Markets where the members of a large hay firm doing a track business admitted that they always added 1,000 pounds to the weights furnished by the country shipper when invoicing the hay to their customers. They maintained that this was done to protect them against any mistake that the shipper might have made in weighing. They also maintained that as the weights were guaranteed to within 2 per cent, it was the duty of the buyer to weigh the hay, and if any error was found to make a claim against them for the amount of the shortage.

There are also several practices on the part of buyers which are considered unfair by the trade generally. In the matter of weights complaints are made that bales are broken in unloading and then not weighed; that drafts are frequently missed when the hay is weighed one or more bales at a time; and that many cars are weighed incorrectly.

The most serious charge against the buyers, however, is that of refusing to accept shipments when the market has declined. When shipments are rejected it is usually maintained that the hay is not of the grade bought. Judging from the information at hand the percentage of rejections by buyers does not seem to be any larger than the percentage of cars containing damaged and inferior hay forwarded by shippers. Various dealers estimate that the percentage in

both instances amounts to about 10 per cent or 15 per cent of all hay shipped.

Trade associations have made numerous regulations designed to eliminate these unfair practices between shippers and buyers, but lack of enforcement authority and of an impartial agency to determine grades seems to be the principal cause of their inability to eliminate them. From its experience in the regulation of the inspection of grain and cotton, the Bureau of Markets believes that Federal inspection of hay made available to the interested parties in any controversy concerning grades would overcome many of the present difficulties and eliminate many of the heavy losses which are ultimately added to the cost of marketing.

The terminal markets are not free from practices which are frequently very unsatisfactory to shippers and buyers using them, but these will be discussed in describing the methods of marketing hay at terminal markets.

## DEALERS IN TERMINAL MARKETS.

While the general methods of handling hay at the various terminal markets are similar, there are many practices that are peculiar to certain markets.

### CLASSES OF DEALERS.

Dealers operating at terminal markets may generally be classed as brokers, commission men, receivers, and shippers. There is no sharply defined line between the various classes, however, for the reason that many dealers conduct their business in such a way as to place them in two or more classes at the same time. For example, it is frequently the case that brokers are also commission merchants, or commission merchants are also receivers and shippers, or, again, receivers are also shippers. The term "distributors" is sometimes applied to that class of dealers designated as shippers to distinguish them from country shippers.

#### Brokers.

Brokers operate usually in large consuming sections, but some are also located in other markets. Their business is primarily to sell hay as direct local representatives of the shipper. The activities of the broker in distributing markets in behalf of the country shipper have already been described, and the business of the broker in other markets is conducted in practically the same manner.

#### Commission Merchants.

There is considerable difference between brokers and commission merchants in most markets, and the services rendered are quite dif-

ferent. As has been stated, the broker assumes no financial responsibility for the commodity he handles, but always considers it as the property of the shipper. On the other hand, in most instances the hay does become the property of the commission merchant for a time.

In general practice the hay is billed to him either on "open" billing, i. e., direct on a straight bill of lading, or on an "order" bill of lading. On the open billing the shipper may or may not draw a draft against the consignee for a part of the value of the hay. Some shippers with large financial resources bill most of their hay to commission firms whom they consider reliable on open billing and do not make a draft against the shipment, but await full payment when the car has arrived at the market and has been sold. The advantage of this method is that when shipping to near-by markets demurrage or storage charges seldom accrue because of the nonarrival of the bill of lading, because the straight bill of lading is mailed direct to the commission merchant and therefore almost always arrives ahead of the shipment. On an "order" bill of lading the shipment is usually billed to the shipper's order and notation made to notify the consignee, which in this case would be the commission merchant.

While bills of lading are generally considered as representing the goods and their possession as conferring ownership, certain restrictions placed upon order bills of lading make them more valuable to those interested in their use. In the first place, since the shipment is billed to the shipper's order the carrier will not release it until the original bill of lading, properly indorsed by the shipper, is surrendered to the carrier's agent at destination. Because of this regulation this form of billing is especially advantageous to the shipper and it has become the practice for hay shippers to bill their hay "shipper's order" and to notify the commission firm which they desire to handle their hay at the terminal market. When the shipper obtains the bill of lading properly signed from the railroad freight agent at point of loading he draws a "sight" or "arrival" draft against the consignee for about 75 per cent of the value of the shipment and, attaching it to the bill of lading, places both in his local bank to be forwarded to the bank's correspondent or some other bank at the place to which the car is billed. The local bank, in many instances, enters the amount of the draft directly to the shipper's credit and he can draw checks against it immediately.

Banks prefer sight drafts payable to the payee upon presentation to those drawn to be paid upon the arrival of the car, and in many instances charge interest on the amount advanced from the date of deposit until the proceeds of the draft are received. Whether drafts are to be drawn at sight or upon arrival is a matter of agreement between the shipper and the commission merchant and the practice is

influenced considerably by the financial standing and the reliability of both parties.

When the draft with the bill of lading arrives at a bank at destination, the bank notifies the commission firm upon which the draft is drawn and the latter immediately, or upon the arrival of the car (whichever time is indicated by the draft) pays the draft and thus obtains possession of the bill of lading. When the car arrives at destination the bill of lading is surrendered to the carrier and switching orders are given for placing the car in position for sale. The car is then sold for the account of the shipper by whatever method is used at that market. Some shippers consign their hay to be sold subject to their confirmation and require their commission firms to report any offers back to the shipper for confirmation before accepting them. Many shippers, however, leave the selling entirely to the judgment of the commission firm, thinking that their experience on that particular market qualifies them to make the most advantageous disposition of the hay.

When the hay has been sold, returns are made to the shipper showing the amount of the sale; the amount deducted as selling charges including weighing and inspection fees, trackage, demurrage charges, interest charges, commission, etc.; and the net proceeds. Interest charges are made only for the amount advanced on sight drafts or arrival drafts and are computed for the period between the time at which the draft is paid and the time at which the commission firm receives payment from the buyer. For arrival drafts this period should be only a few days, the time required to switch the car to selling yards and to make the sale, plus the one day which is allowed buyers in most markets in which to make settlement. If cars are unloaded in the terminal market, however, returns generally can not be made until the car has been switched to the buyer's warehouse and unloaded. In most instances buyers make an advance on the car of about the amount of the shipper's draft, and the shipper therefore should not be charged interest beyond one day at most after the date of sale.

Commission charges vary slightly but at present range from 75 cents to $2 per ton, or a minimum charge of $10 per car. This charge covers all the services rendered by the commission merchant in handling and selling the hay consigned to him.

### Receivers.

Those dealers who buy hay to arrive or for shipment to a market are in some markets termed receivers. There is no clear-cut distinction between receivers and commission men in many markets, and the names are frequently used interchangeably.

The number of receivers in the markets varies with the character of business conducted. Some markets are almost entirely consignment markets and the greater number of the dealers are, therefore, commission merchants. There are several large markets, however, including Kansas City and Memphis, in which the dealers prefer to buy their hay outright from the shipper. When receivers have representatives in the producing sections to buy from shippers, the hay is usually bought shipper's track, the price paid being determined by the buyer's judgment as to the market grade of the hay. When buyers do not go into the territory the trades are made by letter and wire and the terms generally provide that destination weights and grades, market grades and destination weights, or market grades and weights shall be accepted by the shipper.

The shipper seemingly encounters more difficulty and dissatisfaction in marketing his hay by the last-named terms than by any other. The advantages of using these terms have already been described; the difficulties encountered are caused principally by the lack of uniformity in the application of the market grades. The manner in which misunderstandings arise can best be illustrated by a description of two sales made under different market conditions.

Mr. A. is a country shipper and Mr. B. is a receiver located in a terminal market, let us say Chicago. Having decided to sell some hay at Chicago Mr. A. writes to Mr. B. who he has been informed is a reliable receiver, asking for an offer on two cars of No. 1 timothy. Mr. B. immediately wires Mr. A. an offer of $25 per ton for the two cars of No. 1 timothy, prompt shipment, delivered at Chicago. Since no terms are mentioned it is understood that Chicago weights and grades are to govern the settlement. Mr. A. accepts the offer, loads and ships the hay immediately, and it arrives in Chicago in due time. In the meantime, light receipts and an urgent demand cause the market to advance $2 per ton between the date on which the hay was purchased and the time it arrives. The cars are placed upon the sales tracks and Mr. B. goes out to inspect and sell the hay. Upon personal inspection he finds good timothy hay of uniform quality, but scarcely good enough for No. 1 timothy. However, because of the demand he is able to get an offer of $1 more per ton for the hay as it shows at the car door, than he had expected when he bought the hay. He, therefore, accepts the offer and feels that he has made both a good purchase and a good sale. As soon as the hay is unloaded and the weights are obtained, returns are made to the shipper at the contract price. Mr. B. says nothing about the grade of the hay and since he made a satisfactory sale does not have it officially inspected.

About two months later Mr. A. notices that the market shows signs of weakening and decides to offer two more cars of hay to Mr.

B. at $25, the price paid for the other two. The hay he offers is a part of the same lot, which was of uniform quality, as the first two cars. Mr. B. also notes the weakened condition of the market and wires an offer of $24 per ton for the two cars of No. 1 timothy for immediate shipment, usual terms. Mr. A., having the hay already loaded, accepts the offer and bills it out immediately. When the hay reaches the market receipts are considerably in excess of the requirements of the trade, there is practically no demand, and the price of No. 1 timothy has declined to $23 per ton. Buyers are more particular and will not pay full price for anything but strictly No. 1 timothy. Mr. B. tries to sell the hay, but he can get no better offer than $22. Several buyers tell him that his hay is only a good No. 2 timothy. He knows that technically this is true, so rather than take a loss he decides to have it officially inspected.

Seeing the inspector in the yards, he calls him over to the cars and states the case in words something like these: "Say, Brown, I have two cars of hay here which I think grade about No. 2 timothy. I bought them for No. 1, but I don't believe they will grade that. I wish you would inspect them and give me a certificate of grade for both cars. See the brown blades on all of the bales. There are too many of them for No. 1 hay. It was cut a little too late, and three bales up near the top are stained. They are really No. 3 hay. I have an idea that the hay will run worse back from the doorway. However, you are the inspector. All I want is a fair deal." Since the hay is really not No. 1 the inspector issues a certificate for grade No. 2 timothy.

No. 2 timothy is selling at a discount of $2 under No. 1, so Mr. B. wires Mr. A. as follows: "Your two cars of hay in to-day. Grades No. 2. Can accept on sale at $3 discount." Because Mr. A. has no other orders at that time and also because of the expense of reconsignment, he accepts the offer and obtains $21 per ton instead of $24 for his hay. Besides losing the $3 per ton Mr. A. also loses faith in the honesty of Mr. B. and decides not to ship to him again. He can not understand why his hay is accepted as No. 1 when the market is good, but graded No. 2 when the market is declining. On the other hand, Mr. B. says that Mr. A. does not give him fair consideration; that he accepted the first two cars of Mr. A.'s hay which were really not No. 1 and gave him a No. 1 price for them because he himself had a profit; in that light Mr. A. should not object when Mr. B. took only what was really due him on the second lot.

There is no way of knowing how many similar instances occur at the various markets, but they are of a sufficient number to make it desirable that organized markets take some notice of the matter of acceptances and rejections and subject them to some uniform rule. In many markets shippers can not demand the inspection of their

hay, as such services are available only to the dealers in the terminal market who are members of the trade organization which employs the inspectors. Such practices also show the need of impartial inspection available to all parties interested in the hay. Such inspection is now provided for in part by a law recently passed by Congress.

### Shippers at Terminal Markets.

Many large hay markets have a very limited local demand but a large shipping demand. At such markets there are usually some dealers who confine their business to buying hay offered for sale on their market and shipping it to buyers in consuming territories. These dealers are known as shippers in most of the markets. Some commission men are shippers as well as receivers and many receivers are also shippers.

Shippers in central and other distributing markets are an essential part of the marketing machinery for the reason that they create the demand for the surplus hay which is shipped to such markets. They buy the hay on the open market and obtain offers from dealers and consumers in nonproducing sections through brokers, traveling representatives, or by wire or letter. Their business is, therefore, largely that of distribution and their principal efforts are put forth to obtain orders for the amount of hay which they can buy on their market. They do not make a fixed charge for handling the hay as do the commission merchants but depend upon the profits which they may make for compensation. Shippers usually try to make a profit of $1 to $2 per ton and because of the service rendered become a considerable factor in the disposition of the hay shipped to large markets. Many shippers succeed in working up a fairly large business, often amounting to ten or twenty cars per day, and hold it by furnishing their customers with hay of satisfactory quality at current market prices. Competition, however, is sometimes keen, and has caused some shippers to practice unfair methods.

Probably the most common unfair practice is that of shipping hay of a lower grade than that sold but invoicing it at the price of the higher grade. This practice is most common when there is an active demand or when the market is advancing. Under such conditions the buyer takes the hay even when he knows it is not of the grade bought because of one or two reasons. First, he may be out of hay and unable to wait for another car to be shipped; second, the market may have advanced so that the hay he has received is worth what he agreed to pay for the higher quality. The buyer usually remembers an unfair transaction and " gets even " with the shipper by refusing to accept shipments when the market has declined, thus leaving them on track for the shipper to dispose of as best he can.

These practices cause enormous losses from time to time and help to increase the spread in prices between those paid to the producer and those paid by the consumer. Many losses could be prevented by trade organizations if regulations for outshipments of hay were made similar to those now in effect for inshipments. Too many markets seem to be pursuing the short-sighted policy of making regulations which do not give proper consideration to those shipping to the market and those buying from it, with the result that both producers and consumers are now greatly interested in perfecting some marketing agency that will eliminate the large central markets which allow unfair practices.

### MOVEMENT TO MARKET.

By far the greatest part of the hay which moves to large markets is by rail. However, the amount being transported by auto trucks is constantly increasing. At several of the large eastern markets, including Baltimore and Philadelphia, the amount of hay received by truck is almost, if not equal, to that received by rail. This condition is subject to change because only hay from neighboring sections can be marketed by truck and the supply of this hay may be very limited some seasons. Hay is also shipped by boat on inland rivers, but in small lots making up a very small percentage of the total amount shipped. The difficulty and expense of getting the hay to or from the boat, and of finding warehouse space to store the hay until sold, are the principal disadvantages of shipping hay by water. There are practically no facilities for loading hay from the boat to cars and hence but little reshipping can be done.

At practically all markets shipments arriving are placed in outside or hold yards and the consignee is notified. At some terminal markets, however, the various railroads have designated certain tracks or yards as hay tracks or hay yards and place all hay arriving over their lines at these locations. Where special hay tracks have been provided, arrangements are made in some markets whereby the cars are placed immediately on the special tracks. At others the consignee must surrender the bill of lading and order the cars to the destination desired.

At Cincinnati a special yard has been leased by the grain and hay exchange and arrangements have been made by which cars from all roads are placed in this yard for sale. A joint railroad agent is stationed at the yards and bills of lading need not be surrendered until the cars are sold and ready to be reconsigned. A switching charge of $3 is made by the road placing the cars in this special yard, but this charge is borne by the inbound carrier if the revenue is $10 or more per car. At most other markets no charge is made for plac-

ing cars on sales tracks but such tracks are only specially designated tracks in the regular yards of the carrier.

If dealers desire to have cars placed at their warehouses, railroads switch them direct from the holding yards, generally without charge. but if the cars have been placed on the sales tracks there is usually a switching charge. The surrender of the original bill of lading is generally required before cars will be switched to warehouse or unloading tracks.

Railroads usually furnish the inspection department of the local trade association with lists showing the initial and number of the cars together with their location. The name of the consignee is also generally shown but in some markets consignees are assigned numbers and the numbers only are shown on the bulletin. The lists are sometimes posted only in the local yard offices and those interested call these offices by telephone or visit them in person in order to obtain the information.

## METHODS OF SALE.

There are several methods by which hay is sold at terminal markets. Some of the more important are on the exchange floor, at the car door, on plug tracks, at warehouses, and in offices.

### Sales on the Exchange Floor.

In several markets all or a part of the sales are made during the session of the exchange. An exchange, as understood by the trade, is a place at which members of the trade organizations meet for a few hours each week day and buy and sell the commodities which they handle. Some of the markets using this method are Memphis, Indianapolis, St. Paul, and Pittsburgh. The methods of sale on the exchanges vary somewhat in the different markets.

Small samples of hay representing the carloads from which they have been taken by the inspector or sampler may be exhibited on the sample tables. The grade designation as assigned by the inspector is shown on a tag attached to the sample. The buyer inspects the various samples and, if the quality as shown by the sample is satisfactory, endeavors to purchase the car from the receiver or commission merchant having it for sale. The terms of sale usually specify that the entire car must be of a grade equal to the sample and a rate of discount for any low grade is agreed upon at the time of sale.

In other instances no samples are submitted but the cars of hay are offered for sale by grade and description. An official of the exchange conducts the "call" and asks for offers of the various kinds and grades of hay. A member having a car, say of No. 1 timothy, for sale offers one car No. 1 timothy at $26. Bids are then called for.

The first bids made are usually below the price asked and are then raised (unless the market is very weak) to meet the offer of the seller, which is frequently reduced slightly to effect a sale. If the bids and offers do not reach the same amount no sale is effected. Buyers in most cases do not depend entirely upon the grade certificate as to the character of the hay but visit the receiving yards and inspect the hay before the market opens.

The advantage of this method is that it establishes a cash market price for each day upon which bids to country shippers and offers for shipment may be based. It also assures the country shipper that his hay has been offered in an open market and sold to the highest bidder. The principal difficulty arises when the buyer maintains that

FIG. 4.—Selling hay at the car door.

the hay is not all of the same quality and demands a reduction or elects to take it at the price of the lower grade.

### SALES AT THE CAR DOOR.

In a number of markets, including Chicago, St. Louis, and Minneapolis, trading is done in the railroad yards where the cars have been placed for sale. The doors of the car are opened and seller and buyer conclude the sale of the hay at the car door. Since only the bales at the door of the car can be seen, the buyer usually makes the purchase on the condition that all the hay is of the grade showing at the door. If the shipper has loaded the car uniformly and the buyer is fair, this method of sale is satisfactory, although it is sometimes difficult to determine the actual quality of the hay by examining only the ends of a few bales (fig. 4).

Cars loaded with two or more kinds of hay, or with hay varying in quality, can not be marketed satisfactorily by the car-door method. Naturally if hay of more than one grade is shipped in one car, the better grade is placed in the doorway. Buyers, therefore, unless they know the shipper personally or by reputation and know his cars are all of uniform quality and invoiced correctly, usually offer a price sufficiently below the market to protect themselves against any inferior hay. If the full market price is paid for the hay a differential is agreed upon for any lower grade hay which may be found.

The fact that only a very small portion of the hay may be inspected at the time of sale has led to unfair practices on the part of both the country shipper and the buyer. The unscrupulous shipper, knowing the manner in which the hay is sold, frequently loads a certain amount of poor hay in the car where it can not readily be detected. It is possible to load all but about 50 bales with poor hay and still make the car appear as if it were loaded with good quality hay. If such a car is sold to a shipper in the terminal market and is reconsigned, the poor hay is frequently not detected, and the country shipper receives the price of good hay. If the car is unloaded in the terminal market, however, his dishonesty is discovered, and he probably receives less than the hay is really worth.

Some buyers engage in the unfair practice of claiming that the hay is partly off grade when it is not. The claim is always made after the car has been partly unloaded. This practice is carried on somewhat as follows: The buyer having purchased the car at the sales tracks orders it switched to his warehouse for unloading. After two or three tons have been unloaded the buyer pretends that the hay back from the door is of poorer quality than that at the door, which was the basis of the purchase. He therefore calls up the receiver or commission merchant and informs him that the hay in the ends of the car is of inferior quality and that he will reject the remainder of the car. Under the present methods of inspection and marketing the seller can do little else than accept whatever terms the buyer is willing to offer for the remainder of the hay. It has been noted that such rejections occur more frequently on a declining market than on an advancing market, and that the discounts demanded bear a close relation to the amount of the decline in the market.

When hay is hauled direct from the sales tracks, as is frequently the case where the sales tracks are also the unloading tracks, a part of a car can be rejected if the buyer chooses to do so. The remainder of the hay must then be resold. At Chicago a special yard is provided to which these rejected cars can be switched for resale. The expense of switching, etc., is so great that it is a better policy to allow a liberal discount to the original buyer than to attempt to

switch and resell or even to resell on unloading tracks and pay demurrage.

It is thought that these unfair practices on the part of both the shipper and the buyer can be greatly reduced by an impartial inspection and grading system, based upon uniform standards that are understood alike by both buyer and seller.

### Plug Track Sales.

In order to overcome some of the difficulties of other methods of sales several large markets, including Kansas City, Cincinnati, and Omaha, have established "plug" yards. They have been termed "plug" yards because the cars offered for sale there are "plugged,"

Fig. 5.—Selling hay at Plug Yards by the auction method. The hay piled outside the car is called the "plug." The man on the hay is acting as auctioneer.

i. e., a plug consisting of 15 to 50 bales is taken out of the car and placed outside so that the buyer can determine better the character of the hay in the car.

The methods of selling hay at the plug yards differ somewhat at the various markets. At most places, except Cincinnati, the actual selling is carried on in practically the same manner as sales at the car door. The method is considered more satisfactory than sales at the car door, however, for the reason that the buyer can see a good representative sample of the hay he is buying. When 30 to 50 bales are removed from the car there is a good opportunity to see whether the hay runs uniform or not (fig. 5).

Each day the buyers and sellers meet at the plug tracks and consummate sales. The buyers examine the different cars offered, and

when some are found that meet their requirements they inquire the prices; or, it may be that the sellers request offers. In either event the sales are made privately, but in several markets the seller is required by the rules of the commercial organization of which he may be a member to report all sales made, together with the prices received for each car.

At Cincinnati sales at the plug tracks are made by auction, i. e., each car is sold at public auction to the highest bidder. The dealer to whom the car is consigned or who owns the car usually acts as auctioneer; or he may request a member of the board of governors of the plug yards to sell the car for him. If a receiver or commission merchant desires to buy a car consigned to himself, the rules require that a member of the board of governors shall auction the car. This eliminates the practice, which in some instances is unfair to the shipper, of taking a car for the receiver's account without making an effort to sell it. When auctioning cars at Cincinnati, the seller has the privilege of rejecting all offers and selling after the close of the market at a private sale or of carrying them over for the next day's market. A trackage charge of $1 per day per car is charged for cars carried over and the same rules as to demurrage apply as in any other city.

At a few markets where there are no proper facilities for plugging in the manner aready described, cars are sometimes "wagon plugged." The hay in part of the doorway and in one end of the car is loaded onto wagons. That left in the car is transferred into the space made vacant by the removal of the hay onto wagons, and the hay from the wagons is then loaded back into the car in the opposite end from which it was taken. By this method practically every bale may be seen and graded if desired. When hay is handled in this manner buyers usually conclude the sale after the hay has been graded either at the railroad yards or on the floor of the exchange.

The terms of plug track sales differ somewhat from those applying to other methods. The hay is not sold by grade and in most markets plug sales are final. The buyer has had an opportunity to examine the hay and he, therefore, is not allowed any discount if it is not of the quality it appeared to be when examined at the plug track. The seller frequently guarantees the hay to be of uniform quality and the buyer may request that the car be plugged deeper if he is doubtful about the uniformity of the loading, but otherwise no claims are allowed after the car has been sold.

This system of marketing at terminal markets is quite satisfactory to country shippers and commission merchants, but because of the fact that unscrupulous shippers are able to place from 50 to 75 bales of poor quality hay in the cars with but little danger of de-

tection, the buyers frequently experience considerable loss and some will buy only such cars as the seller guarantees to be uniformly loaded with hay of the quality shown by the plug (fig. 6).

The practicability of the plug method depends to a great extent upon the facilities available for plugging the cars. The plug yards must be located so as to be convenient to the trade and so that the railroads may place cars in them with the minimum amount of expense. At Chicago, for example, it has been found impracticable to establish plug yards for the reason that no place is available that can be reached economically by all the principal roads bringing hay into that market. At Memphis, cars are plugged and inspected and the hay is loaded back into the cars immediately because the yards do not afford a desirable place for selling. The cost of selling by the plug method is greater than the others commonly used and varies from 75 cents to $3 per car according to the services performed.

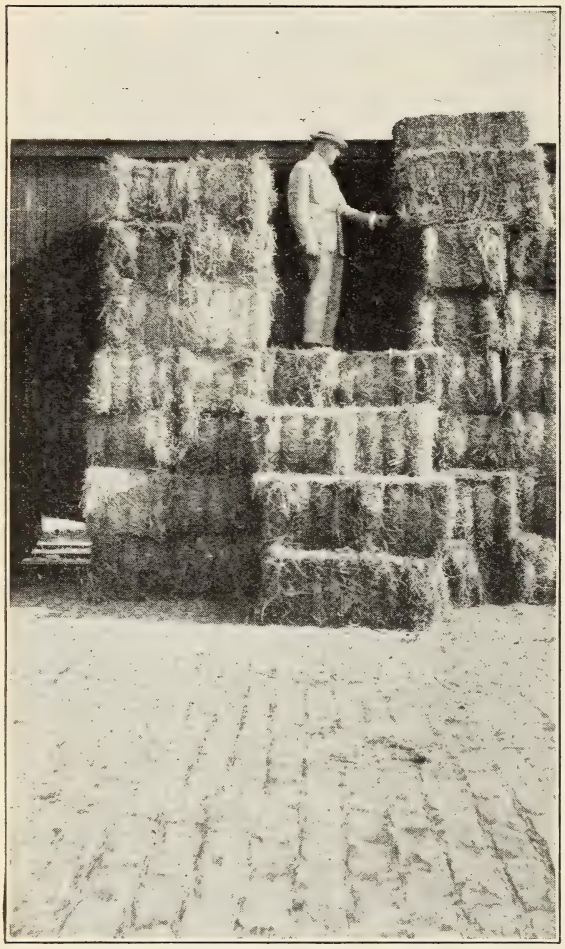

FIG. 6.—Showing quantity of hay usually taken from the car as a plug.

SALES AT WAREHOUSES.

At New York, Boston, Baltimore, and other eastern markets, as well as at several southern markets, the railroads maintain warehouses into which all hay is unloaded upon arrival and from which practically all sales are made. The hay from each car is stored separately so that its identiy is not lost. The dealers visit these warehouses each day, and the hay is disposed of at private sales between

buyers and sellers. So far as the transactions between the dealers at the warehouses are concerned the hay is not sold by grade, but the buyer determines whether or not it is of the grade desired. Grades are usually applied only to hay which has been bought to "arrive" as of a certain grade specified.

There are three advantages in selling from warehouses. Sales may be conducted regardless of weather conditions, dealers may see the exact character of the hay offered, and when receipts are in excess of the demand the hay may be left in storage at a reasonable cost and not forced upon a market already overloaded. This method is confined almost entirely to places where practically all the hay is consumed in the market, and is not considered economical in markets where most of the hay is reshipped and reconsigned to consuming sections, because the costs of unloading and reloading outweigh the advantages.

There is no question but that the possession of large storage space stabilizes a market. Some shippers maintain that terminal dealers are opposed to warehouses because they tend to eliminate the wide fluctuations in hay prices whereby speculation at the expense of the country shipper becomes possible. It is thought, however, that the cost of operation under present trade practices is the principal reason that they are not maintained in distributing markets.

### Office Sales.

When for any reason hay offered for sale by any of the methods already described is not sold during the trading period, it is frequently sold later. The dealer having the hay for sale may know of some buyer who was not at the market and may visit him at his place of business or call him by telephone and sell the car to him. If no local buyer can be found, the seller may wire several out-of-town buyers and sell the hay to one of them. The terms of such sales are usually the same as those applied to sales on the open market except that when the buyer has not seen the hay its character is fully described during the transaction.

### Merits of Various Methods of Sales.

It is impossible to designate any one of the methods named as the best. Some have decided advantages over others but each one has been adopted in the particular market in which it is used because dealers think it is best suited to the facilities of that market.

Under present conditions and practices it seems that the warehouse method is best in those markets where practically all the hay is used locally and can be hauled by wagon or motor truck direct from the warehouse. In large distributing markets the plug method seems most satisfactory when the proper facilities are available.

### TIME OF SETTLEMENT.

Most large markets have fixed rules governing settlement for hay sold in the open market. Cash settlements are usually made within 24 or 48 hours after the time of sale. When the hay is to be unloaded or weighed in the market in which it is sold, an advance of about 80 per cent of the value is required in lieu of the full cash settlement. When hay is reshipped or reconsigned an advance is usually required of the buyer if destination weights or grades are to govern settlement, but if market weights and grades guaranteed are to be accepted a full settlement is required within the customary time limit. Time sales are generally made only by local dealers in a market to other dealers or consumers who are outside of the membership of the commercial exchanges.

### SHIPMENTS AND RECONSIGNMENTS.

The amount of hay shipped or reconsigned from the different markets varies considerably but the percentage is much larger in the central western markets than in those of any other section. The following table gives the estimated percentage of the hay received that is reconsigned from the principal distributing markets:

| Market. | Receipts. | Reconsignments. |
|---|---|---|
| | *Cars.*[1] | *Per cent.* |
| Kansas City | 46,000 | 80 |
| Chicago | 17,500 | 17 |
| St. Louis | 13,500 | 50 |
| Cincinnati | 10,000 | 90 |
| Pittsburgh | 7,000 | 85 |
| Memphis | 4,750 | 75 |

[1] Approximate number for year 1920.

A large part of the hay reconsigned from the central western markets moves to the large consuming sections in the South and Southeast. A considerable part of the alfalfa reshipped from Kansas City goes east and northeast into sections in which the production of alfalfa is small and is used for dairy and mixed feeds.

Most of the shipping and reconsigning is done by the shippers in the terminal markets and is a phase of hay marketing which is distinct from the other methods already described.

### SALES BY SHIPPERS.

When hay is sold in the terminal markets at car door or plug tracks a large percentage is bought by the shippers located in that market. A small amount is bought by local dealers. The rules of most of the local hay trade organizations prohibit other than members from

trading on the various markets, therefore outside buyers or shippers seldom become a factor in the markets.

Shippers depend upon orders from consuming sections for their business. When many orders are received the shippers are active buyers in the market, and when no orders are received they remain out of the market unless they buy to store or in anticipation of orders. Shippers frequently buy hay when they have no orders for it, if in their opinion it is good business to do so, and then offer the hay for sale by wire or letter. If the orders received are not equal to the hay bought it frequently is resold upon the market on the succeeding days.

### Obtaining Orders.

The shipper at the terminal market obtains his orders by the same methods and through the same agencies as does the country shipper, namely, by wire, by letter, through brokers, and through traveling salesmen. These agencies have already been fully described.

### Terms of Sale.

The acceptance of an order by a shipper constitutes a sale for him, and the terms are almost always included in the confirmation of sale, which is usually sent by wire or mail immediately upon receipt of an order if it is accepted.

The items usually included in the terms of sale are: Quantity, kind of hay, time of shipment, and terms of settlement.

### Quantity Sold.

The quantity sold is usually expressed only in carloads, but the number of tons is sometimes also mentioned. Certain trade rules provide that the number of bales shall also be stated, but this is seldom done because it is usually impossible for a shipper to tell how many bales will be contained in the car he buys. It is also frequently impracticable to state the number of tons.

### Character of Hay Sold.

The most difficult thing to state satisfactorily in the confirmation of sale is the character of hay sold. Numerical grades for hay have been adopted in practically all hay markets, and generally there is a fairly good understanding in the terminal markets as to the character of the hay represented by the grade designation. In the consuming sections, however, local conditions seem to be a factor influencing the interpretation of the grades, so that the ideas of buyers as to the quality represented by certain grades vary in the different

sections. For example, mining sections seem willing to accept a much lower grade of hay for No. 1 timothy than small markets with a retail trade. The price is also given consideration, and buyers frequently specify No. 1 hay and then refuse to pay more than the price of No. 2. Shippers in the various markets in competition for business have made use of these conditions to such an extent that quotations and sales by grade have come to have but little meaning.

These conditions have also led to the substitution of certain terms for the numerical grades, such as "Choice timothy hay," "Good feeding hay," etc. The need for the term "Choice timothy hay" has developed because of the tendency on the part of the shippers to lower the quality of No. 1 hay to agree with the ideas of the least exacting purchasers, and in some instances the grade represented by "Choice timothy hay" has also been lowered, as is evidenced by a number of samples examined by representatives of the Bureau of Markets, which were found to be lower than the recognized standards for No. 1 timothy.

Many shippers who desire to build up a permanent trade with their customers are supplementing the numerical grade designation with descriptive phrases in order to make clear the character of the hay offered or sold. This, it is claimed, eliminates many of the difficulties encountered when hay is sold by grade only.

The greatest care should be used in describing the character of the hay when confirming the sale, in order that as little difficulty as possible may be experienced when the hay is received by the buyer.

The fact that descriptive terms are needed indicates that present grade terms are inadequate or are at least not sufficiently clear. The Bureau of Markets is at present engaged in the study of market grades for the purpose of determining wherein they are deficient, and, if possible, of constructing grades or standards that will be adequate for the use of the whole trade in the purchase and sale of hay.

### TIME OF SHIPMENT.

The trade terms used to denote the time within which a shipment may be made have been defined by trade associations, and their use is fairly uniform throughout the country. These terms are: Immediate shipment, which has been interpreted as three calendar days; quick shipment, five calendar days; and prompt shipment, ten calendar days (Sundays and holidays excluded). For shipments which are to be made within a period longer than 10 days the time is usually stated. Sales are frequently for "scattered shipment." This means that the hay is to be shipped a car or two at a time at a rate as uniform as possible over a given period. The advantage of this method is that it assures the buyer of a constant supply at a

uniform price. The shipper, however, hesitates to sell on such terms unless the market is fairly steady or he is certain of a sufficient amount of hay to fill the order. When the time is not stated in the terms of sale it is generally understood that prompt shipment will be made.

TERMS OF SETTLEMENT.

On hay shipped from terminal markets the terms of settlement are almost always either "sight" or "arrival" draft, but the arrival draft is used much more extensively because buyers generally refuse to pay for the hay until they have inspected it. The number of instances in which the hay is shipped on open billing is few.

Because much of the hay sold by shippers in terminal markets is bought by them on track in their respective markets and is reconsigned directly from the track the terms of sale relative to the weights and the grades that govern settlement vary a great deal. Unless the hay has been loaded from a warehouse at a terminal market it is almost impossible for shippers to give official weights.[1]

The term most used is "shipper's[2] weights guaranteed within 2 per cent."[3] Outturn weights, however, are frequently specified, and, in fact, "shipper's weights guaranteed" are practically outturn weights, for the guarantee can not be enforced unless the hay is weighed at destination to determine the correctness of the shipper's weights.

Considerable difficulty is experienced with weights when hay is sold on the terms just mentioned. The weighing facilities of both the country shipper and the buyer at interior points in consuming territories are frequently very poor and their weighing methods are inefficient. The country shipper, therefore, is often not sure that his weights are correct; nevertheless he bases his invoice upon them and sells or consigns his hay to the terminal market.

The receiver or commission merchant there offers and sells the hay on the open market and offers the shipper's weights or invoice as evidence of the amount of hay in the car. The shipper buys the hay and reconsigns it to his customer, using the country shipper's weights as the basis of his invoice. The buyer, if he has scales, usually weighs the hay as he unloads it. If the outturn weight, considering the 2 per cent tolerance allowed, is less than the invoice weight, he makes an affidavit as to the correctness of his weight and attaches it to a

[1] "Official" weights are those obtained by the official weighing bureaus which are maintained by the trade organizations at most terminal markets. A full description of methods of official weighing is given in Bulletin No. 978; The Weighing of Market Hay, by G. A. Collier and H. B. McClure. 1921.

[2] "Shippers" in this instance refers to country shippers.

[3] In some markets the tolerance allowed is only 1 per cent, while in others as much as 3 per cent is sometimes allowed.

claim for the loss in weight, which he forwards to the shipper from whom he bought the hay. The shipper having practically guaranteed the weight usually pays the claim and in turn makes a claim upon the receiver or commission merchant from whom he bought the hay. If full settlement has not been made with the country shipper, the claim is generally allowed, and the returns made to the country shipper are upon the basis of the outturn weights.

If full returns have been made by the commission merchant upon the sale of the car at the terminal market, as is frequently the case under the present methods of sale especially on plug tracks, the country shipper may not pay the claim presented to him: he may think that his weights are just as accurate as those of the ultimate buyer and he may have good reasons to think so. If he will not allow the claim, he is requested to furnish an affidavit as to the correctness of his weights. The commission merchant or receiver then presents this affidavit to the terminal market shipper, who, with an affidavit as to the correctness of the weights of both the country shipper and buyer, has no other recourse than to present a claim to the railroad for loss in transit. Since a physical loss frequently can not be shown, the terminal market shipper usually stands the loss. This loss must be added to the cost of doing business.

One large shipper in northern Indiana estimates that the average shortage on hay shipped direct to consuming sections is 800 pounds per car. This loss, which at present seems to be unavoidable, has led to questionable practices on the part of some shippers from terminal markets. One of the most common of these is the raising of the country shippers's weights 500 to 1,000 pounds and trusting to the buyer's neglect to weigh the hay. The amount gained in this way is used to offset the loss which may be occasioned when the hay is weighed.

The country shipper and buyer both contend that their weights are correct. The middlemen must, therefore, stand the loss unless by some means, fair or otherwise, he can shift it to some of the other interested parties. If some means could be found for having all hay weighed by a competent disinterested agency, preferably at the terminal market, so that a certificate of weight could be furnished both the shipper and buyer, most of the difficulty as to weights could be eliminated.

At the present time the grades which are to govern transactions between shippers and buyers cause more controversies and disputes than any other item in the terms of sale.[4] Grades have been made the excuse for rejections, excessive discounts, and other claims on the part of buyers. The present market practices seem to be the prin-

[4] The matter of grading is fully discussed in Bulletin No. 980, Inspection and Grading of Hay, by H. B. McClure and G. A. Collier. 1921.

cipal cause of a great many of these misunderstandings. The character of the grades, as has already been mentioned, is also a contributing factor.

In the first place, official grade certificates for outbound shipments are seldom furnished by shippers from terminal markets. A number of reasons have been advanced for this practice. It is claimed to be impracticable to issue certificates for cars that have been only "plug"or car-door inspected. However, such certificates are issued and used in settlements for hay in inbound shipments. Grade certificates for hay loaded out of warehouses at terminal markets are issued in only a few instances; in some markets, it is stated, $1 or $2 per ton more is charged for hay with which a grade certificate is furnished. It appears, therefore, that the grade stated by shippers in their quotations and terms of sale are personal grades and not official market grades. Many shippers claim that the grades given the hay are those desired by the buyer, but since the buyer would hardly reject hay which conformed to his own ideas as to grade it is doubted whether this is the reason for the use of such grade terms by shippers.

It has been noted also that more No. 1 hay is shipped out of the various terminal markets than the official records show has been shipped into them during a stated period, or, in other words, the grades seem to have been raised on outshipments. This practice is never satisfactory to the buyers and they usually show their disapproval whenever they have an opportunity to do so.

One of the remedies for the difficulties now experienced in connection with grades in the terms of sale is to state definitely what grades are to be used, i. e., whether they are individual or personal grades, market grades, or association grades. Another remedy is to leave the interpretation and application of the grades to a competent and disinterested party whenever possible.

### OTHER MARKET PRACTICES.

In an apparent effort to overcome some of the difficulties experienced in shipping hay from terminal markets under present conditions, dealers in some of the western distributing markets have engaged in a marketing practice which is a combination of the activities of both a commission merchant and a shipper. Such dealers solicit orders from buyers in the same manner as shippers do and also solicit consignments from country shippers. When orders are received they are filled from the consignments which have been made by country shippers to these dealers. The advantage claimed is that the shipper consigning the hay receives more than if it were sold on the market because he obtains the whole amount paid by the

buyer or consumer less only one commission. If only one commission is charged, the country shipper may receive more for his hay than if it is sold upon arrival at the terminal market.

There are so many other factors entering into the transaction, however, that it is doubtful whether it can be considered fair to the shipper unless his consent has been obtained to handle the sale in this manner. In the first place, the country shipper usually consigns to a terminal market for definite reasons. Lower prices may seem imminent and in order to market his hay before they occur he may rush his hay on consignment to a neighboring market. In this case it would certainly be unfair to the shipper for the commission merchant to reconsign his hay upon a previous sale to some distant point at which it may not arrive until the market has declined. If the shipment should be refused and heavy charges should be incurred, it would be clearly unfair to the shipper to have to stand a discount to cover them, yet such would probably be the case under these conditions. Again, the country shipper may have consigned his hay because of an expected advance in the market and he may desire to have his hay sold to the highest bidder upon arrival. In that case it would be unfair to him to have his shipment of hay applied upon a sale made at an earlier date and probably at a lower price. These practices are unfair to shippers to terminal markets, and should be eliminated by the regulations prescribed for those markets. If a market does not have such regulations, shippers should ascertain whether their consignments are handled fairly or not.

### ADJUSTMENTS.

It is generally very difficult to adjust satisfactorily disputes and controversies that arise relative to terms of sale. Trade organizations have arbitration committees to which controversies which principals are unable to settle between themselves may be referred, and as a last recourse the civil courts may be called upon to decide the issue. But few cases get into the courts, however, and only a small number are referred to arbitration committees.

In most cases the parties in a dispute relative to the terms of sale, weights and grades, etc., present their claims and counterclaims to each other by letter and the matter is finally settled by one or the other, or probably both, making some concessions. When considerable money is involved the one making the claim frequently calls upon the other party, or sends a representative to call, and makes a personal effort to adjust the matter. The state of the market frequently has a great deal to do with the adjustment of a claim. Misunderstandings or misinterpretations of the terms of sale and nonfulfillment of them are the principal causes of disputes and all per-

sons interested in the marketing of hay should strive to use clear, distinct terms, that can not be misinterpreted and that cover the transaction thoroughly.

### KINDS OF HAY RECEIVED AT PRINCIPAL MARKETS.

The kinds of hay received at the various markets and the size of bales preferred are shown in the tables, pages 46 to 49, inclusive.

Generally speaking, timothy is the principal hay handled in the markets east of the Mississippi. Clover and clover mixed are also handled, with some alfalfa. In the markets in the Southeastern States other hays, such as peanut hay, Bermuda, Johnson grass, and lespedeza, are handled to a small extent. West of the Mississippi alfalfa and prairie are the principal hays. On the west coast the division seems to be about equal between alfalfa and grain hay.

Eastern markets pay a premium for the large box-press bale. Central western markets prefer the 16 by 18 inch or 17 by 22 inch bale. In the southwestern markets, where considerable hay is baled from the windrow, a small two-wire bale not larger than 16 by 18 inches, weighing about 70 pounds, is given preference.

The preferences of the different markets for certain sizes of bales have never been explained, but from a survey recently made by the Federal Bureau of Markets it seems that precedent is the most important factor. Dealers who prefer the large bales assert that the hay comes out of the bale in better condition and does not have the "life" pressed out of it. From the meager data available, however, recompressed hay seems to be as nourishing as ligthly pressed hay. In this light it would seem that the appearance of the hay is the important factor since hay taken from a box-press bale appears better than that taken from bales from other kinds of presses. In southern markets where the hay is sold to retailers and consumers the smaller bales are prefererd because they are lighter to handle. Where hay is baled from the windrow, as is the case in the Southwest, the smaller bale is preferred because it is not so likely to spoil as a larger, more tightly pressed bale.

Considerable expense would be eliminated in baling if a standard size of bale could be adopted because only one size of press and one length of wire would then be necessary. Some of the difficulty of loading minimum weight into cars would also be overcome.

## WHOLESALERS AND RETAILERS IN CONSUMING TERRITORIES.

Many of the important factors which should be considered in a discussion of the marketing of hay in consuming territories have already been described in detail in the discussions of marketing by the country shipper and at the termial markets. Since purchases by

*Requirements of the various eastern, western, and southern hay markets, showing kinds of hay received, types of bales, methods of inspection, weights, and the most common faults that affect the selling price.*

EASTERN MARKETS.

| Markets. | Kinds of hay received.[1] | Types of bales in demand (weights in pounds). | Inspection. | Kinds of market weights used. | Methods of receiving and selling. | Common faults that affect the selling price of market hay. |
|---|---|---|---|---|---|---|
| Baltimore, Md | Tim, cl, cl-mx | Small 3-wire[2] (100), large (200–230). | Warehouse | Car, loaded and unloaded, at terminal warehouse. | Warehouse, each carload separated into grades. | Presence of fine grasses, weeds, daisies, and plantain; meadows kept in hay too long. |
| Boston, Mass | Tim, cl-mx, cl, some al. | Large upright[2] (190–220), small. | None | Official[3] | Terminal warehouses | Late cutting, mow burn, and presence of weeds and daisies. |
| Chicago, Ill | Tim, cl, cl-mx, pr | 14 by 18 inches (100), 16 by 18 inches (125). | Door, bale | Railroad, official | Holding yard, private warehouses. | Presence of other grasses; cut too late. |
| Cincinnati, Ohio | Tim, cl-mx, cl, alsike cl. | Small[2] (100–125), large (200–230). | Plug | Official, on hand-truck scales at warehouses. | Private warehouses; sold plug track. | Clover cut too late; presence of white mold, weeds, and stubble; "white top" very common; bales often "sandwiched." |
| Cleveland, Ohio | Tim, cl-mx, cl | Medium | Door | | On track | |
| Columbus, Ohio | Tim, cl-mx | Medium, small | do | Shippers, with guarantee attached. | | |
| Duluth, Minn | Tim, upland pr, mx | Small (100) | Door, bale | Railroad, shipper's, consignee's. | On track, private warehouses. | Streaked bales, caused by improper curing; considerable wet hay received. |
| Indianapolis, Ind | Tim, cl-mx | Small, large | Door | | Private and sample on exchange. | |
| Minneapolis, Minn | Tim, cl-mx, pr | Medium | do | Railroad track scales | Private warehouses | |
| New York, N. Y | Tim, cl-mx, cl, someal. | Large upright[2] (190–220), small (100–125). | Door, warehouse. | Tag, corrected by averaging actual bale weights. | Terminal warehouses | Late cutting, mow burn, and presence of weeds and daisies. |
| Philadelphia, Pa | Tim, cl-mx, some al | Medium[4] (100–125) | do | Railroad track scales; wagon scales at private warehouses. | Holding yards; sold at yards or in warehouses. | Most of the low-grade hay caused by late cutting and improper methods of curing. |
| St. Louis, Mo | Tim, cl-mx, al, pr, cl | Small[2] (80–100), large | Door | City wagon scales | On track, private warehouses. | Cut too late; "sandwiched," as most of the product has been stacked and carelessly baled. |
| Washington, D. C | Tim, cl-mx, cl | Medium, large | do | | Private warehouses | Cut too late; reddish color; presence of fine grasses. |

WESTERN MARKETS.

| | | | | | | |
|---|---|---|---|---|---|---|
| Boise, Idaho | Tim, al, tim-mx | Small | None | City wagon scale, shipper's, consignee's. | Private warehouses | Timothy and mixed hay often cut too late. |
| Butte, Mont | Tim, al, bluejoint | do | do | do | do | Meadows are allowed to become too old, resulting in a mixed hay not in demand. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Denver, Colo. | S. Park wire-gr, al, Colo. upland. | Small[2] (80), 16 by 18 inches. | do | Railroad, shipper's, consignee's. | do | Streaked bales caused by improper curing; prairie hay not uniform in quality. |
| Los Angeles, Calif. | Bar, wh, oat, al, tim. | Medium (150) | do | Railroad, city | do | Grain hay often cut too late; presence of dirt and weeds; hay sometimes contains too much moisture. |
| Ogden, Utah | Al, tim | Small | do | City wagon scale, shipper's, consignee's. | do | Low-grade timothy caused by other grasses in meadows used too long for hay. |
| Phoenix, Ariz. | Al, wh, oat, bar | Small (70–90) | do | Railroad, city | do | Irrigated hay too coarse; first crop of alfalfa often badly infested with foxtail and other grasses. |
| Pocatello, Idaho | Al, tim | Small | do | City wagon scale, shipper's, consignee's. | do | Alfalfa often baled before being thoroughly cured, causing it to heat and spoil. |
| Portland, Oreg. | Tim, cl, wh, al, nat, vet-mx. | Medium[2] (100–150), large (200). | do | Railroad, city | do | Clover hay often moldy or dusty; meadows used for hay too long. |
| Pueblo, Colo. | Pr, nat, al | Small[2] (80) | do | City wagon scale, shipper's, consignee's. | do | Timothy often contains foxtail; prairie hay of poor quality, due to cutting too late. |
| Salt Lake City, Utah. | Tim, al | Small[2] (80–100) | do | do | do | Timothy often improperly cured in wet weather; timothy from old meadows contains too much redtop and wild grasses; rain spoils hay in partly baled stacks. |
| San Antonio, Tex. | Jn, N. Tex pr, al, cane, C. | Small (70–80) | Door | City | do | Cane hay cut too late, too coarse; prairie hay has too much "red" late-cut grass; Johnson grass often too coarse. |
| San Francisco, Calif. | Wh, oat, w-oat, bar, rye, grain-mx. | Large (200–220) | None | Railroad, city | Holding yards, sold by auction system.[5] | Grain hay often cut too late; presence of dirt and weeds; hay sometimes contains too much moisture. |
| Seattle, Wash. | Tim, al, wh, redtop-mx, Sound hay. | Medium[6] (100–150), large (200). | do | City wagon scale, shipper's, consignee's. | Private warehouses | Hay often heats on account of improper curing or storing. |
| Spokane, Wash. | Tim, al, wh, bluejoint. | Small (100–120) | (7) | do | do | Timothy meadows used too long; grain hay cut too late; considerable hay heats after being baled. |

[1] The several kinds of hay are shown in the order of importance of demand. The meanings of the symbols are as follows: al=alfalfa, bar=barley, Ber=Bermuda grass, C="coast" hay, cl=clover, corn=baled corn shucks, cr=crab grass, gr=grass, Jn=Johnson grass, lt=light, mil=millet, mx=mixed hay, N=north, nat=native, pr=prairie hay, S=south, Tex=Texas, tim=timothy, vet=vetch, w=wild, wh=wheat.
[2] Kind preferred.
[3] The official market weights referred to are those certified by inspectors officially appointed by the various hay markets.
[4] Medium or three-quarter bales, 17 by 22 inches, preferred.
[5] Private warehouses used for storing hay for city trade and export.
[6] Medium preferred, compressed for export.
[7] Consignee has privilege of inspection.

*Requirements of the various eastern, western, and southern hay markets, showing kinds of hay received, types of bales, methods of inspection, weights, and the most common faults that affect the selling price.* Continued.

SOUTHERN MARKETS.

| Markets. | Kinds of hay received.[1] | Types of bales in demand (weights in pounds). | Inspection. | Kinds of market weights used. | Methods of receiving and selling. | Common faults that affect the selling price of market hay. |
|---|---|---|---|---|---|---|
| Atlanta, Ga. | Tim, al, Ber, Jn, mil, corn. | Small [2] (70–100), medium 3-wire (150). | Door, bale. | Official, shipper's, consignee's. | | |
| Augusta, Ga. | Tim, Jn, Ber, nat-mx. | Small [2] (80–100), large 5-wire (200). | None | Shipper's, consignee's | Private warehouses | Johnson grass very often cut too late. |
| Birmingham, Ala. | Tim, al, Jn, lt-mx-tim. | Small [2] (80) | Door | Railroad, shipper's | do | Local-grown alfalfa often improperly cured. |
| Charleston, S. C. | Tim, tim and gr-mx. | Small | None | Railroad, city | do | Timothy often cut too late, has reddish color, and is mixed with briars and grasses. |
| Columbia, S. C. | Tim, Ber, Jn | Small [2] (16 by 18 inches), large (18 by 22 inches). | do | do | do | Timothy often cut too late, has red color, and contains trash and weeds. |
| Fort Worth, Tex. | Jn, pr, al, C | Small [2] (60–80) | Door | City | do | First crop of Johnson grass often cut too late and improperly cured. |
| Galveston, Tex. | Tex. pr, Jn, al, C, tim | do.[2] | None | do | do | Cane and Johnson grass cut too late; prairie has reddish color caused by being cut too late. |
| Houston, Tex. | Jn, pr, al, C | do.[2] | Door | do | do | Do. |
| Jackson, Miss. | Tim, al, lt-cl-mx | Small | None | Shipper's | do | Local-grown alfalfa off color and improperly cured. |
| Jacksonville, Fla. | Tim, lt-cl-mx, some cl. | Medium [1] (100–125), small (70–90). | Door, warehouse. | Consignee's, shipper's | do | Medium bales should have three wires; little demand for the lower grades of hay. |
| Little Rock, Ark. | Pr, al | Small [2] (60–80) | Door,[4] plug. | City | do | Red color in prairie hay is most common fault found with hay in this market. |
| Macon, Ga. | Tim, cr | Small [2] (80–100), large 5-wire. | None | Shipper's, consignee's | do | Local-grown hay often of poor color. |
| Memphis, Tenn. | Tim cl-mx, pr, al. | Small [2] (60–100) | Door, bale. | Official [3] | do | Sandwiched cars and bales often received; considerable hay off color; demand for timothy of better grades only. |
| Mobile, Ala. | Tim, al | Small (80–100) | (5) | Shipper's, city | do | |
| Montgomery, Ala. | Jn, tim, al, Ber | Small [2] (80–100), 14 by 18 inches. | None | do | do | Large amount of lower grades of timothy received in the past has caused this kind of hay to cease to be in very great demand. |
| New Orleans, La. | Tim, pr, al, cl-mx, cl. | Small,[2] large | Bale | Platform scale at warehouse. | Terminal warehouse | A large percentage of hay grades low on account of being too mature and improperly cured. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Norfolk, Va | Tim, lt-cl-mx, cl | Small, medium [2] (100-125). | Door | City | Private warehouses | Timothy often cut too late, has reddish color, and is mixed with briars and grasses. |
| Pensacola, Fla | Tim, al | Small (80) | [6] | Shipper's, city | do | More low-grade hay received than in demand. |
| Raleigh, N. C | Tim, nat | Small [2] (125), large | None | City | Private warehouses | Timothy often cut too late, has reddish color, and is mixed with briars and grasses. |
| Savannah, Ga | Tim, pr, al | Small (90), large | Warehouse, bale. | Platform scale at warehouse. | Terminal warehouse | Timothy often mixed with redtop, other grasses, and weeds. |
| Shreveport, La | Tim, al, pr, Ber | Small [2] (60-70), 14 by 18 inches. | None | Shipper's | Private warehouses | Local-grown alfalfa off color and improperly cured. |
| Tampa, Fla | Tim, pr, cl | Small [2] (90-100), medium (120-150). | do | Consignee's, shipper's | do | Medium bales should have three wires. |
| Wilmington, N. C | Tim, some cl | Small [2] (125), large | [6] | Tag | do | Timothy often cut too late, has reddish color, and is mixed with briars and grasses. |

[1] The several kinds of hay are shown in the order of importance of demand. The meanings of the symbols are as follows: al=alfalfa, bar=barley, Ber=Bermuda grass, C="coast" hay, cl=clover, corn=baled corn shucks, cr=crab grass, gr=grass, Jn=Johnson grass, lt=light, mil=millet, mx=mixed hay, N=north, nat=native, pr=prairie hay, S=south, Tex=Texas, tim=timothy, vet=vetch, w=wild, wh=wheat.

[2] Kind preferred.

[3] The official market weights referred to are those certified by inspectors officially appointed by the various hay markets.

[4] Inspection under Little Rock Exchange rules.

[5] Chamber of commerce sometimes inspects hay.

[6] Buyer has privilege of door inspection.

wholesalers and retailers in consuming sections are coincident with sales by shippers in the producing sections and at the various markets, no further explanations will be needed concerning these transactions.

### LOCATION AND PREFERENCES OF CONSUMING TERRITORIES.

Taking the country as a whole, only a small percentage of the hay produced, estimated at from 15 to 20 per cent, is shipped out of the county in which it is raised, thus leaving 80 to 85 per cent to be consumed locally. Certain well-defined areas, however, do not produce sufficient hay for their requirements and these are known as consuming territories. Roughly defined they are as follows: The New England dairying sections; the mining sections of Pennsylvania, Michigan, and Wisconsin; the section south of the Ohio and Potomac Rivers and east of the Mississippi; certain sections of Louisiana, Texas, and New Mexico; and nonproducing sections west of the Rocky Mountains.

Timothy and light clover mixed hay are preferred and constitute the bulk of the hay handled east of the Mississippi River. Alfalfa and prairie are most extensively used west of the river. A good deal of alfalfa is beginning to be used in southern and southeastern sections also.

Timothy hay in general is preferred in markets where the demand is from draymen, horse liveries, etc. Clover and alfalfa meet the demand from dairymen; prairie, while used in place of timothy to some extent, is most extensively used for feeding stock which is being carried through the winter. While timothy, clover, alfalfa, and prairie are considered the principal commercial hays, native hays are marketed to some extent in the territories in which they are grown. In the South, peanut hay, peavine hay, Johnson grass, Bermuda, and lespedeza hay are grown and marketed locally, but are not shipped to any very distant markets.

### DISTRIBUTION.

The bulk of the hay marketed in consuming sections is bought from the country shipper or shipper in terminal markets, direct or through a broker, by wholesalers or retailers located in the consuming sections. Wholesalers usually have storage for several cars of hay and unload most of it upon arrival. It is then sold in whole or split carloads to consumers and retailers in the same or surrounding markets. Carload orders to wholesalers are usually filled if possible by diverting or reconsigning hay which is en route or which has been ordered by the wholesaler while the hay unloaded in the warehouse is generally used for filling split-car orders, i. e., orders for one carload composed possibly of grain, feed, and hay. Split-car

orders constitute an important part of the business of most wholesalers in southern markets. Retailers sell mostly in small quantities to consumers.

### WEIGHTS.

In those sections where tagged weights are used the hay is sold on the weights indicated on the tags. The advantage to the dealers of using these weights is that it eliminates any loss from shrinkage or handling because they sell the hay by the same weight by which they buy it and any loss is thus passed to the consumer.

In many distributing markets all hay is weighed as it is sold. By this method the consumer gets what he pays for but the dealer, to cover the loss caused by handling, etc., must charge slightly more for his hay. In a few places hay is still retailed by the bale, the dealer basing the price per bale on the average weight of the bales as indicated by his invoice for the car. Unless the weight of the bales is uniform this method is an unsatisfactory one to the purchaser.

### GRADES.

In retailing only a few grade terms are used. Hay is almost always sold as No. 1 or good hay. If the dealer has some mixed hay the amount of the mixture is usually stated. In some instances the use for which the hay is best suited is stated when describing the character, for example, "Good rabbit hay," "Choice dairy alfalfa," or "Good sheep hay." When the hay offered is not considered first class it is usually not given a grade designation but the dealers describe it as "good feeding hay, just a little ripe," or "No. 1 hay containing just a few weeds," or possibly "good hay that is a little dark," etc. In general very few consumers have any conception of the quality represented by any grade terms other than Choice and No. 1 hay and these terms are, therefore, used with such modifications as have been mentioned.

### TERMS OF SETTLEMENT.

No sight or arrival drafts are used by retailers and the time of settlement depends on the character of business done. Some dealers sell for cash only, others allow 30 days' credit, and still others allow accounts to run as long as a year. In dairy sections the time of settlement is frequently made to coincide with the date upon which the dairymen receive pay for their products, which may be once a month. In the South settlement for the whole season is commonly made when farmers market their cotton. It will be seen that no single method of settlement is used throughout consuming sections, but that that method is used which is best suited to local conditions.

## SUGGESTIONS.

While a good many unfair methods are at present practiced by those concerned in the marketing of hay it appears that most of them are related to loose methods of business on the part of various agencies engaged in the handling of hay. On the basis of careful observations made throughout the hay producing and consuming sections, and at the principal markets, it is thought that some improvement in the methods of marketing hay can be affected by observing the following suggestions:

On the part of the country shipper: (1) More care in grading, weighing, and loading the hay; (2) better forms for use in confirming sales, tabulating and stating weights, and for invoicing hay; and (3) more care and accuracy in stating terms of sale.

On the part of dealers in terminal markets: (1) The elimination of the practice of allowing the state of the market to influence the fulfillment of contracts with country shippers; (2) more uniform methods of handling in terminal markets; (3) better weighing methods and more consideration of contents of weight certificates; (4) more uniform grading practices; (5) grading inbound and outbound hay on the same basis when hay is bought and sold on grade designations; and (6) the elimination of the practice of "boosting" grades on outshipments.

On the part of dealers in consuming sections: (1) More careful weighing of purchases; (2) elimination of rejections when price decline is the only factor; and (3) better records relative to contents and weight of a car when unloading.

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